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THE
WORKS

OF

JOHN HUXHAM, M.D. F.R.S.

IN TWO VOLUMES.

VOL. I.

CONTAINING,

Observations on the AIR and EPIDEMIC Diseases. Part I.

A Comment on ICTERIC Disorders.

A Dissertation on SLOW NERVOUS FEVERS.

A Treatise on the DEVONSHIRE COLIC.

Observations on the AIR and EPIDEMIC Diseases. Part II.

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OBSERVATIONS
ON THE
AIR
AND
EPIDEMIC DISEASES.
PART I.

From the Year 1728 to 1737 inclusive.

TRANSLATED
From the LATIN Original.



TO

THE HIGHLY CELEBRATED

Sir HANS SLOANE, Bart.

P R E S I D E N T,

A N D

To the ILLUSTRIOUS MEMBERS

O F T H E

ROYAL SOCIETY OF LONDON,

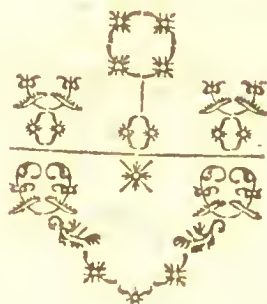
The following Observations are dedicated by
the A U T H O R.

Most Learned GENTLEMEN,

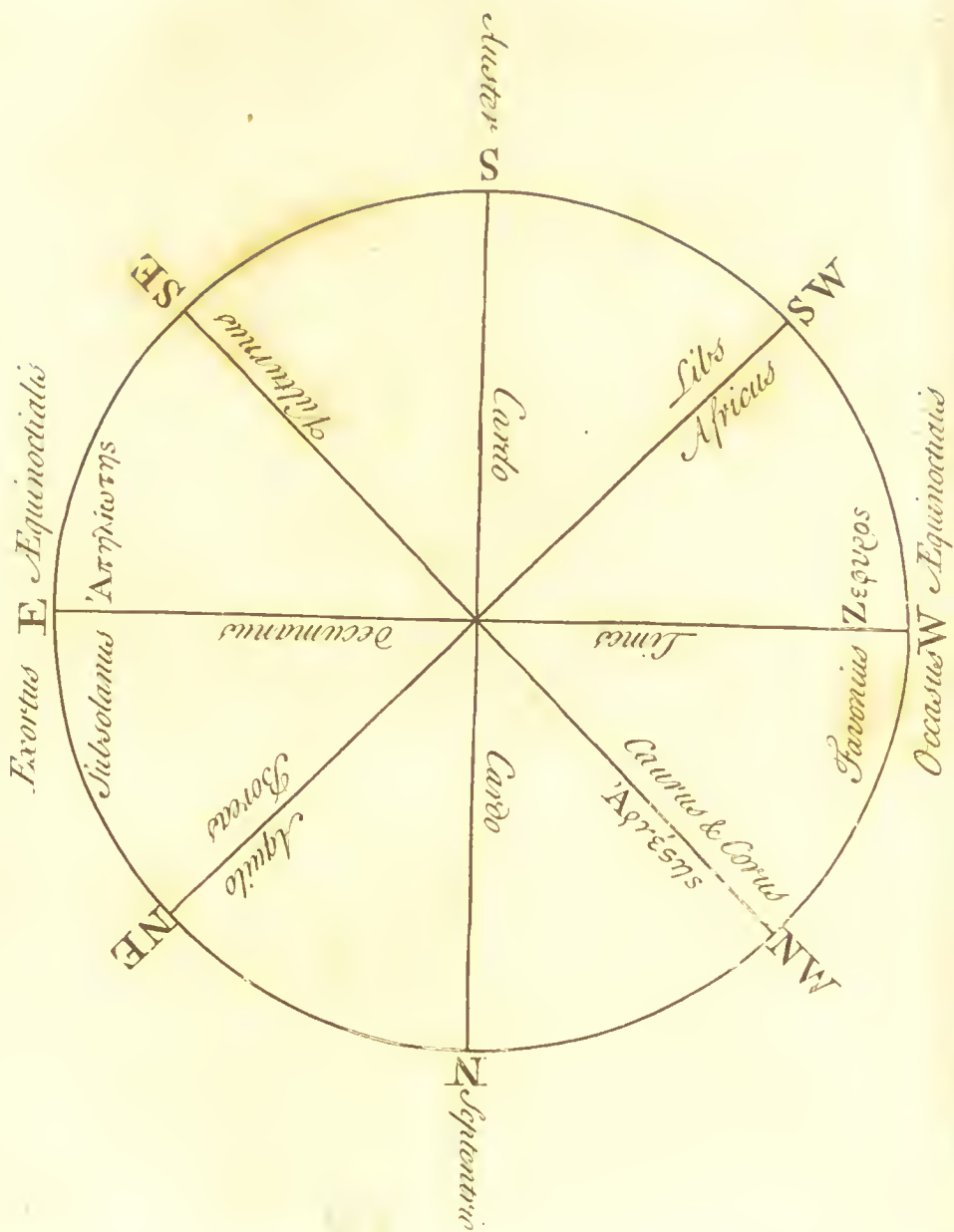
YOU have already kindly received some small Pieces of mine, amongst which were my Meteorological Observations from 1724 to 1727.---The Continuance of such Observations, from 1728 to 1737, I have now published, in composing which,

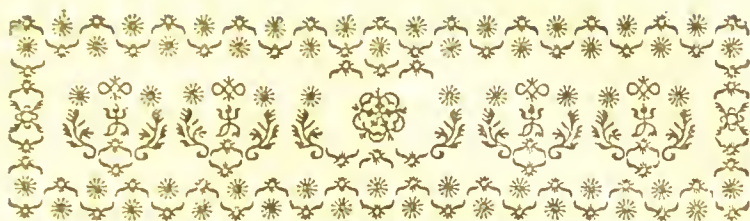
DEDICATION.

which, I have used the utmost Care
and no small Degree of Labour;
and added to them, in the Course of
the Work, a great many Remarks on
the epidemical Diseases then oc-
curring.




THE





T H E
P R E F A C E.

NOTHING is so necessary to the Life of all Animals as the common Air itself, without which they cannot survive even a very few Moments; but, as this is liable to so many and great Changes, it must prove of the highest Importance to Physicians to observe and note them well: This our most ancient and best Master in Physic, *Hippocrates*, recommended to us, and hath left us a noble Example of it in his first and third Book of Epidemics, (which all allow to be genuine) where he accurately describes the Constitution of the Air preceding the common Diseases. — This certainly was done with great Reason, for the depraved Constitutions of the Atmosphere are the Causes of almost all epidemic Distempers, nay even the Increase and Duration of such as are

B properly

properly filed Contagious, greatly depend on those Constitutions. For do we not see in one Year, for Instance, in this Town, or that City, one, or two, only seized with the Small-pox, or Measles, whereas in another Year, from one Person, at first seized, the Contagion spreads to immense Numbers; so that the very Air seems to foment, or suppress the Contagion, like as a Spark of Fire, thrown on proper Materials, bursts out into a vast Conflagration, whereas falling into Water, or the like, it is presently extinguished.

What may be the $\tau\omicron\varsigma\acute{\alpha}\iota\omicron\nu$ of *Hippocrates* and the ancient Physicians, which they assigned as the Cause of pestilential Diseases, I know not; but if they meant, as some will have it, something peculiarly inflicted by an angry Deity on a rebellious People, as a Punishment for the Violation of his Laws, that truly is to be averted by most humble Prayers and unfeigned Repentance, without which there is little or no Room to hope for Assistance from Medicine.

But this let us pass over, as beyond our Reach, and briefly consider the certain and manifest Effects of the Air on our Bodies, whence we shall easily see how necessary it is that Physicians should carefully observe and attend to them.

First then, Respiration (in which as it were even our very Life consists) cannot be performed

formed but by Means of the Air, which dilates the Vesicles of the Lungs, and makes Way for the whole Mass of Blood to circulate thro' them, and which here receives a very great Change; for being rendered too thick and viscid by its very slow Motion through the large Veins, and being also supplied with crude Chyle, it is thrown out of the right Ventricle of the Heart not properly qualified for the Circulation, and Nutrition of the Body, but after having been distributed through the innumerable capillary Arteries, which surround the Vesicles of the Lungs in a Kind of Network, it there undergoes a Compression on all Sides, partly from the inspired Air, partly from the re-acting Blood, and partly from the Contraction of the Vessels themselves, and these acting every Moment in a variety of Ways, so that the Blood in the Lungs is every Way agitated and mixed, and hence its larger Moleculæ are very greatly divided.—Here it is also more especially that the red Globules of Blood seem to be formed out of six serous ones, (as appears by the Microscope) just as we form a large Globule of Quicksilver from smaller ones, which likewise requires some small Degree of Force and Compression.—In the Lungs also the Particles of the fresh Chyle are worked into a proper globose Figure fit for the Uses of animal Life.—All these Things are further

more effectually performed in the Action of Expiration, by the Contraction of the Lungs, and the Collapſe of the Ribs preſſing them.

The Lungs therefore ought to be eſteemed the chief Organ of Sanguification ; hence it is no Wonder that they, who have weak Lungs, become cachectic and hydropic, nor that thoſe, who live in a bad Air, are diſeaſed.

The Commiſion, Attrition, and Sanguification of the Chyle (if I may ſo term it) in the Lungs is altogether neceſſary both to Nutrition and the Motion of the Muſcles, for we ſee neither of them performed by any Blood, that hath not paſſed through the Lungs, for this is obſervable from the coronary Arteries to the ultimate Ramifications of the Aorta.—Some Animalcules therefore have a Kind of Air-veſſels, or Vent-holes, from Head to Tail.

Secondly—The Air ought not only to be free from noxious Vapours, but of a juſt Degree of Gravity and Elasticity, that it may diſtend the Lungs ſufficiently, and yet not oppreſs them by an Over-load—for though robuſt Perſons eaſily enough bear either a very heavy, or light, Atmosphere, and are healthy on the Top of a Hill, or Depth of a Valley, the Infirm cannot well bear the Change, and therefore ought to be more careful as to theſe Matters—you ſee, in the Practice of Phyſic, that the N. E. Wind, that raiſes the Mercury
in

in the Barometer, greatly prejudices some, on the other Hand some by a southerly Wind sink with the Baroscope.—But more of this hereafter ; only by the Way taking Notice that a high Situation is best for the former, and a low one for the latter, other Things not forbidding ; for according to the Situation the Column of the incumbent Air is more or less produced, and its Pressure accordingly greater, or less ; hence some find themselves better near the Sea, others in mountainous Places.

Thirdly—Air fit for Respiration ought neither to be too hot, or very cold ; for the Use of the inspired Air is to temperate the Blood, which would otherwise grow too hot, and putrefy, as is evident from the Experiment of the most excellent *Boerhaave* * made in a hot House ; for if the Air is more hot, or even equally hot as the Blood of any Animal, it certainly soon dies.—Nor doth the Air only refrigerate the Blood, but by preventing its too great Ebullition, and condensing it, hinders it from bursting the Vessels. This indeed is of exceeding great Importance, if with the very learned *Helvetius* † we suppose the Capacity of the right Ventricle of the Heart to be greater

* Vide *Boerhaav. Chem. Cap. de Igne Experim. xx. Coroll. 16.*

† *Eclaircissemens concernant la Maniere dont l'Air agit sur le Sang dans le Poulmons.—Paris 4to, 1728.*

than that of the left, and that the pulmonary Arteries are larger than the correspondent Veins, for it thence follows that the Blood ought to be considerably condensed by the inspired Air, that an equal Quantity of Blood may be received, in one and the same Time, by the pulmonary Veins and left Ventricle of the Heart, that is thrown off from the right Ventricle and through the more capacious pulmonary Arteries.—This indeed many deny, asserting quite the Contrary.—It is necessary however that the Aorta should receive as much Blood from the left Ventricle of the Heart as is thrown off from the right Ventricle through the pulmonary Artery, and that in the very same and equal Time, or a fatal Deluge would soon overwhelm the Lungs, because the Contraction of each Ventricle is made at one and the same Time; we always find therefore the Aorta and pulmonary Artery, in a natural State, equal: On this Account also the Capacity of the Ventricles ought to be equal that they may receive, in one and the same Space of Time, equal Quantities of Blood.—The same Proportion likewise seems necessary between the pulmonary Arteries and Veins, (for what the former protrude the latter transfit) there is no Necessity at least why these Veins should be made more capacious than the Arteries, for the Air being much cooler than the

3

Blood,

Blood, and applied to it by Inspiration throughout the whole Substance of the Lungs, cannot but condense the Blood, to such a Degree indeed as may be sufficient to suppress a too great Effervescence thereof, to which it would otherwise be very liable on Account of its great Agitation and consequent Heat.—Hence Asthmatic Persons are obliged to draw in the coolest Air during the Paroxysm (to wit, when the Lungs are too turgid with Blood) lest they should suffer speedy Suffocation.—Thus in ardent Fevers, and on violent Exercise, Persons are obliged to breathe much quicker than ordinary that by fresh, cool Air, frequently inspired, they may refrigerate the Blood and keep it within due Bounds.

The inspired Air therefore should as much condense the Blood in the Lungs, as the Attrition, and Comminution of its Particles expands it, otherwise the rarefied Blood would suffer too great an Expansion, which is almost the same as if its real Quantity was made superabundant.—But seeing the left Ventricle of the Heart is only equal to the right, how could it receive this augmented Volume of rarefied Blood? and if not, what Mischief would ensue?

What Reason thus suggests a careful Examination of dead Bodies confirms, if it is made on sound Animals soon after their Death; for

it is very improper to compare the Capacity of a Vein and its correspondent Artery a long Time after Death, as the Arteries being much more elastic contract much more than the Veins; hence the Arteries are found much more constricted, and almost empty of Blood, at least of the serous Part of it.—Nay if we attempt to fill both the one and the other with Wax by a Syringe, the Arteries resist much more than the Veins, and do not admit of equal Distention—the same is true of the Ventricles of the Heart, as the left is much thicker and stronger than the right.

From what hath been said above it is sufficiently evident how necessary it is to supply the Sick, particularly those in a Fever, with cool Air, especially in hot Weather.—I have very often seen the restless Anxieties and Faintness in a Fever taken off in a Moment by only opening the Windows of the Chamber, which the imprudent Nurse in vain endeavoured to remove by hurtful volatile Spirits, as they are called; indeed in such Cases the warm Cordials are so far from relieving, that they greatly hurt, for the Inspiration of fresh cool Air, and sometimes Bleeding, if necessary, are vastly more effectual, because they are caused by a Congestion and too great Rarefaction of the Blood in the Lungs.

However the Air fit for Breathing should not be too cold: *Joseph d'Acosta* tells us, that the Air on an exceeding high Mountain in *Peru*, is so extreemly cold, that sometimes at one single Blast it congeals the Blood in the Lungs—nay the *European* Colds, especially in the northern Regions, very frequently bring on fatal Peripneumonies, truly sometimes not only the Lungs, but the very Limbs are gangrened by the Vehemence of the Cold.—Those therefore, who are to travel through a very cold Atmosphere, should frequently drink tepid Liquors, and draw in the warm Vapours of them by the Breath to preserve a due Laxity of the Vessels, and a proper Fluidity of the Blood.—'Tis not a little dangerous to go abroad Fasting in an exceeding cold Air, I have often known dreadful Peripneumonies arise from it.

Thus much of the Power of the Air in the Lungs — let us now briefly see what Effect it hath on the whole Body.

First then, let us consider the Air as a heavy circumambient Fluid perpetually pressing upon us; so that a Man of a middle Stature sustains from it no less than a Weight of 32,000 lb. an immense Load which would press out every Drop of Juice that is in us, unless the Pressure was equal on all Sides, and the Blood and Humours in the Vessels equally resisted the Pressure, so as to keep up a Kind of Equilibrium.

brium.—And this the most wise Creator of all Things hath made most highly useful to us, for it not only conserves and strengthens the whole Frame of the Body, but confines its Humours within proper Bounds.—I think indeed this very Pressure doth not a little contribute to keep on the Circulation of the Blood.—For, as the whole Body is continually compressed by the incumbent Atmosphere, it must force the Blood through the Veins towards the Heart, seeing it cannot run back by a retrograde Motion into the Arteries on Account of the Valves, that are found up and down in the Veins. So little indeed of the original Motion, impressed by the Heart on the Blood, remains in the larger Veins, that it would scarce mount from the Feet to the Heart, unless to preserve, as it were, an Equilibrium in the Veins and Arteries, which, being contiguous, form a Kind of inverted Syphon, whose Legs are of equal Altitude:—So slow truly is the Progress of the Blood in the Veins of the Limbs, that many Valves are placed in them to take off the Weight of the superincumbent Blood, lest it should slide back towards the Extremities.—It seems therefore by its mere Motion in the Veins not capable of overcoming the constrictive Power of the Heart and forcing into the Ventricle, so as sufficiently to dilate it.—The perpetual Pressure therefore of the Atmosphere
adds

adds to the Momentum of the Blood, acting as a Kind of Antagonist against the innate and strongly constrictive Power of the Heart, which is more or less the natural Faculty of every Sphincter-Muscle.—For as soon as the Lungs, expanded by Inspiration, make Room for the Blood issuing out of the Heart into the empty Blood-Vessels of the Lungs (a Kind of momentary Vacuum being made in them by the Expansion of the Lungs) the heavy Atmosphere, constantly compressing the whole Habit of the Body, forces as much Blood into the right Ventricle of the Heart as it can well receive, whilst at the same Time the elastic Air, rushing through all the Lungs and pressing on all its Blood-vessels, adds no small Degree of Force to the very rapid Currents of Blood, which are observed to be here vastly much swifter than in any of the Branches of the Aorta*; so that by this Means the Momentum of the Blood is so much increased as to force into the left Ventricle of the Heart.

But enough of this, as it is not my Design in this little Work to give a compleat Account of the Circulation of the Blood; I only would here by the Way take Notice, that the Pressure of the Atmosphere is one, out of many, and that too not a contemptible one, of the Causes of the Circulation of the Blood, and to

* See *Hales's Hæmastaticks*, Experiment X.

hint at the same Time how much the Gravity of the Air may promote, and its Levity retard it.

But as we now most certainly know, from the History of the Barometer, that the Weight of the Atmosphere is greater at one Time than another in the Ratio of $\frac{1}{10}$ of the baroscopic Column of Mercury, so great a Difference cannot but very greatly affect us, who are subject to it; seeing that it amounts to 3200 lb. the half of which we oftentimes bear in a very few Hours.—But we have above shown that the Pressure of the Atmosphere much contributes to promote the Circulation of the Blood, its greater Weight therefore increases, and a lesser diminishes it:—Hence it happens that when the Air is dry and serene, that is when it is endued with a proper Gravity and Elasticity, we find ourselves more alert and strong; for, the Velocity of the Blood being increased, our natural Secretions and Excretions are increased also, especially Perspiration, which being duly carried on produces both Vigour of Mind and Body.—But further, a greater Compression on our Bodies constricts the Vessels through the whole external Habit, which in Effect is the same as if the very Quantity of the Blood was increased, for it not only quickens the Motion of the Humours, but also the more the external Habit is pressed, the more Blood is

is forced to the internal and most vital Parts, whence they are enabled to exert their Action with more Force.—Pure and elastic Air therefore not only best of all concocts the viscid, crude Chyle in the Lungs, but also through the whole System of the Vessels.—However if a very great Gravity, and Elasticity of the Air continues for a very long Time, it produces Diseases depending on a too great Motion of the Blood, such as Pleurifies, Squinzies, Peripneumonies, ardent Fevers, and the like; and more especially if other Qualities of the Air concur, such as Cold, or Heat, as we shall see hereafter.

Secondly,—An Air, devoid of a due Degree of Gravity and Elasticity, brings on contrary Disorders, for thence a slower Circulation ensues, diminished Secretions, lessened Perspiration, and at length too great a Lensor of the Blood; hence that Languor both of Body and Mind when such a Constitution of the Atmosphere prevails, which by Continuance augments the Evils daily; yea even the secondary Mischiefs increase the original, and mutually promote each other, till at length, consequent to all these, arise hypochondriacal and hysteric Affections, intermittent, remittent, putrid, slow nervous, and petechial Fevers; in a Word all such Diseases as arise from too great a Lensor, and slow Circulation of the Blood.

But

But since all the Effects of the Atmosphere, which flow from its Gravity and Levity, receive great Force from its secondary Qualities, to wit, Heat and Cold, Moisture and Dryness, let us say something of these also.

And first of cold and dry Air. — Cold contracts all the Vessels of the Body, at least such as it touches : — The same Ring which you can scarce put on your Finger in Summer, in the cold Winter Season you may easily shake off ; judge then from the Constriction of that very small Part how much the whole Body suffers : But when the Vessels are constricted they act with much greater Force on the contained Fluids than when they are relaxed, for by Cold the Elasticity of the Fibres is increased, and of Course a greater Contraction of the Vessels both attenuates the Humours more, and also accelerates their Motion : For as the Capacities of Canals are to one another through which a certain Quantity of Blood runs in a certain given Space of Time, so in an inverse Ratio are the respective Velocities of that Liquid, the Capacity therefore being diminished the Velocity is increased.

But what attenuates the Blood and increases its Velocity must necessarily promote the more fluid Secretions and due Excretions, whence all the animal Functions will become more valid ; but since a heavy and elastic Air, which is ve-

ry commonly also cold and dry, is effective of all this, by the united Qualities even greater Effects are produced, so that, thus conspiring, the vital Powers are raised higher than they ought to be, and at length destroy themselves. —For thence arises such a strong Attrition between the Solids and Fluids, such a rapid Course of the Blood, the Skin moreover being corrugated by the Cold such a Dissipation of the thinness and Retention of the thickest Parts of the Blood, till at last it becomes very acrid, and exceeding viscid, which when forced into Vessels unfit to receive it (the serous Arteries for Instance) brings on all Kinds of inflammatory Disorders ; and this more especially when an immoderately dry Atmosphere doth not supply sufficient Moisture to restrain the too great Rigidity of the Fibres nor a sufficient Quantity of diluting Humidity to the Blood, which is continually drawn in by the Pores when it is at Hand.

However what is hurtful to some greatly benefits others, and whilst acute, pleuritic and peripneumonic Fevers affect some, a severe Asthma, Rheumatism and Gout others, a cold, dry, weighty Atmosphere renders Persons, especially of a pretty firm Constitution more lively and healthy ; — nor is there any Thing spirits up the heavy *Dutch* Vulgar more than a long continued sharp Frost, for they are then

as alert as the most gay *French*. — This the *Coan* Sage remarks (Aphorism 17. Sect. 3.) which *Celsus* thus translates “ *Aquilo sanum* “ *Corpus spissat, & mobilius atque expeditius reddit.*”

But secondly of a cold and moist Air—which very greatly hurts us, as its Cold constricts the Pores and its Moisture shuts them, both one and the other hinder Perspiration very much;—even electrical Bodies send forth their Effluvia much more sparingly in moist than in dry Weather.—Every one knows how hurtful cold wet Shirts and Sheets are.—Besides a showery, rainy Season lessens the Gravity of the Atmosphere, and its too great Humidity enervates the Force of the Fibres, and both impede the Velocity of the Blood, and of Course the due Secretions and Excretions from it: Hence ferous phlegmatic Humours, Rheums, Tumours of the Fauces, Coughs, Squinzies, and many other Disorders, and at length, if such a Season continues long, catarrhal Fevers, intermittent, putrid, and slow nervous Fevers, unless these retained Humours are happily thrown off by the Skin, which is best, or by Urine, or Stool, before they begin to putrefy.

Nor doth a moist and cold Constitution of the Air hurt only in the Manner described, but even the very cold Humidity is drawn into the Body by the Pores.—Even the great
Father

Father of Medicine; *Hippocrates*, 2000 Years ago asserted this imbibing Power of the Body, when he pronounced that the whole Body was not only *ἐκπνοον* (exhaling) but also *εἰσπνοον* (inhaling) and so *Galen* interprets this last Word; to wit of Moisture or Vapour being drawn in through the Pores of the Skin.—And this is abundantly evident from many Experiments, no other Way being open to the Particles of Quicksilver, or Turpentine, into the Blood, but by the Pores, when they are only rubbed on the Skin, or applied in the Form of Vapour:—This the Experiments of our very acute Countryman, Dr. *James Keil*, likewise confirm: Nay he, with great Probability, supposes the Absorption of the gelid Particles of the Air to be the most common Cause of what we vulgarly call *Taking Cold*, the very frigorific Particles (or if you please nitro-aerial) being drawn in with the moist Vapours, which vitiate the Blood and the Lymph.

Whether there is indeed such a frigorific Principle, as a nitro-aerial Salt, as *Mayow* calls it (or what other Name others may give it) is greatly doubted by many eminent Philosophers, who lay it down that the Cause of all Cold is only a Privation of Motion and Heat: An Opinion I do not altogether approve of, for I would know whether there is any Thing more positive in Heat than in Cold? Have we

not as sudden and certain a Sensation of the one as of the other? Which perhaps is not so easily to be explained from a mere Cessation of Motion; nor do positive Effects flow from a simple Privation, or Relation, but many actually arise from Cold, as the Expansion of some Bodies, the Condensation of others, permanent Changes, and a vast many other Things. Water, when it freezes, is expanded, an Argument that it receives something *ab extra*, otherwise, from the mere Absence of Motion and Heat, it would be condensed; as Metals, when in Fusion, are expanded, but when they grow cold and rigid they are again contracted.—Besides the Water that flows from Ice, when thawed, is much more cold than it was before Congelation, and is unfit for many Uses after, that it was before proper for; this every old Woman knows—nay those that drink Ice-Water are thence subject to several Disorders.—Hence *Juvenal*

“*Quis tumidum Guttur miratur in Alpibus?*”

I don't well see indeed how Water can be congealed by the mere Privation of Motion, if, with the greatest Philosophers, we suppose that its Particles are spherical, as seems most probable, because Water never acquires any Heat by the most violent Agitation; for the Friction (the Cause of Heat) between Spheres is the least that can possibly be assigned, for it plainly

plainly hence follows whether in Motion, or at Rest, they can only touch in Points, whence their Cohærence would not be the greater on Account of their being at Rest; which however is infinitely greater in Ice than in Water. —Moreover Water is most difficultly frozen, if ever, in *Vacuo*, where there is certainly sufficient Rest, and yet the very same Water poured off in Contact with the freezing Air freezes in a Moment, nay even whilst it is pouring off, as the most diligent *Fabrenheit* hath observed, Philosoph. Transact. No. 382. — Something therefore is necessary from the Air to effect Congelation.

Their Opinion therefore seems more probable, who assert the Cause of Congelation to be some frigorific Spiculæ admitted from without, which, though they may not remove the aqueous Sphærulæ much the one from the other, increase the Quantity of Contact between both, and of Course their mutual Cohæsion. Perhaps there is no other Hypothesis, that will explain the remarkable Expansion of Water when it is frozen; which Expansion of Water however, turned into Ice, happens to it whether the Water was before devoid of Air, or not.

But, inasmuch as we are obliged to use some Kind of saline Body in producing all Sorts of artificial Congelations, it is not absurd to sup-

pose these frigorific Spiculæ are of a saline Nature.

Now that there is such a saline Principle diffeminated throughout the whole Atmosphere, is very probable from the Generation of Vitriol in Colcothar, how much soever it may be deprived of its Acid by Distillation, or any other Method.—Nitre * also is produced de novo in mere *Terra damnata*, as they call it, in the most insipid Ashes, if there is a free and proper Communication between these and the open Air. Whence comes the Nitrum calcarium, as it is called, but from this Salt of the Air? We see Iron contracts Rust on the highest Towers from the same Principle.—A great many Minerals, and metallic Glebes, recover their pristine Nature, though they had been utterly divested of their Salts by Fire, from the very same Origin.—The illustrious *Newton* acknowledges the Existence of this universal Acid, and the celebrated *Homburg*, from chemical Analysis, thinks it to be the Parent of all Kinds of Salt, as it is received by this, or that Matrix, and united to this, or that Kind of Matter.

But it seems not unreasonable to think this Salt to be of a nitrous Nature, as we see the Aciculæ of Nitre, and the Spicula of Ice, yea even the saline Particles of Dew, to be most

* See *Hoffman's* History of Nitre.

nearly of the same Form ;—and this seems further probable if we consider what Travel-
 lers * of the very best Credit relate of *Arme-
 nia, Tartary, China, &c.* Countries where Nitre
 very greatly abounds—viz. that, though the
 Sun there burns up almost every Thing in the
 Day-Time, a sharp Frost comes on at Night,
 the nitrous Salts, which the Sun had elevated
 in the Day, falling in such great Abundance
 by Night.—Even in our own Country after a
 pretty hot Day, especially in the Spring-Season,
 we often find, the following Morning, the
 Pools covered with Ice, and the Fields with a
 Hoar-Frost ; which would happen likewise
 sometimes in the very Summer †, if the Power
 of the Sun, at that Time vehement, did not
 break and scatter the nitrous Particles, not so
 abundant here as in the East. — These Things
 indeed seem to argue that an Abundance of
 the nitro-aerial Matter is more efficacious in
 producing Congelation than the mere Paucity
 of Fire, for in the Middle of Winter, when
 the Thermometer denotes a far greater Degree
 of Cold, there is often not the least Appearance
 of Frost any where.—Truly the Degree of Cold,

* See *Tournefort's Voyage du Levant*, Lettre 18. — *Le
 Comte Itinerar. Chinois.*

† In 1743, *June* the 13th, in the Morning, there was
 a smart Frost here, and almost throughout the Kingdom.
 Therm. early in the Morn. 50.

in which Frost is produced, seems by no Means constant and certain; for I have often observed Frost in the Month of *March*, or *April*, when *Hauksbee's* Thermometer was at fifty-five only, yet none at all in the Month of *December*, when it sunk to sixty-five. — But of this enough. — Thirdly therefore of a hot and moist Atmosphere: Heat expands every Thing, even Iron itself, much more then the Humours and Vessels of the human Body, but the Rarefaction of the Blood, and Relaxation of the Vessels, much rebates the Momentum of the Blood, hence the Secretions and Strength diminish, and therefore we do not find ourselves so active in the Summer, as in Winter, or the Spring. — They that inhabit very hot Climates are scarce fit for the common Offices of Life but in the Night, they sleep all Day almost, especially when the Sun is fervent.

But if the Air is not only sultry, but too moist, a very unhealthy Season ensues, for Heat as well as Moisture relaxes the Fibres, what then will they do conjoined? They destroy their very Tone almost. — And for as much as a moist Temperature of the Air takes off commonly from its due Gravity, which as we have shewn above lessens the circulating Force of the Blood, and as a moist Air also hinders due Perspiration, such a Constitution of the Atmosphere

sphere hath been justly deemed from the very earliest Times pestilential.

The obstructed Humours then become daily more and more acrimonious, and from a Defect of due Motion the Lymph grows roapy, the Blood runs into grumous Concretions, and its Salts, mutually attracting each other, form dangerous Moleculæ, and at length the Mass of Humours putrefies : Hence a vast Number of Diseases arise both acute and chronic when such a heavy and untoward Constitution of the Air prevails — in which how short so ever the Stay be, the most Strong soon find the Powers of both Body and Mind become much more languid — and further the Air loaded with Vapours, especially sulphureous (as appears from the Experiments of the noble *Boyle* and most acute *Dr. Hales*) loses very greatly of its Elasticity, so that it scarce hath Power to expand the Lungs, whence a little before, and during the Time of Lightening and Thunder, many People breathe with great Difficulty, the Atmosphere then sweltering with sulphureous Vapours. — Hence it is also that many infirm Persons can scarce bear the noisome Air of a City, polluted with innumerable Stenches, even for a Day or two, who yet are tolerably well, nay cheerful in the open Air of the Country. — The Respiration indeed of pure, open Air so much conduces to Health, that in very many Disorders

ders Medicine avails very little without it.— This I have so often noted that I cannot but join with the most elegant Poet, “ O fortunatos nimium, sua si Bona nôrint, Agricolas!” — whose Business and Diversion both are in the most salubrious Fields: For the Country Air is much more pure and elastic than that of Cities contaminated with all Kinds of Effluvia, raised up by the Sun, especially in Summer. Besides it is more cool, and invigorating from the refreshing Exhalations of the Ground and Herbs, and thus most fit to recreate the Spirits, and expand the Lungs, and, not being fouled with greasy Vapours, it by no Means impedes the Perspiration, nay greatly promotes it: Hence the pure and most grateful Air of the Country inspires us with Chearfulness, since it is so very beneficial both to Respiration and Perspiration.

Fourthly of a hot and dry Air—which, though much more healthful than that above described, is not altogether innoxious, especially if it continues so a long Time. For a dry Air is commonly of great Gravity and Elasticity, which quicken the Motion of the Blood, and, as it is very hot, it greatly draws off the perspiring Humours, so that the serous and most liquid Parts of the Blood fly off, and are dissipated, whence the Remainder grows too thick, for little, or nothing, now of Moisture

ture is drawn in through the Pores from the torrid Atmosphere. — Hence arises a great and strong Attrition of the Blood-Globules, and Heat of Consequence, which being continually also increased from without exalts the Acrimony of the saline and sulphureous Parts of the Blood, till at length they become extremely acrid, and the more so the less the Blood is cooled in the Lungs. If you expose the sweetest Butter, or any animal Oil, to the intense Heat of the Sun, for any Time, it soon runs into a putrid alkaline and very corrosive Liquor. Thus the long Heat of the Summer so roasts, as it were, the animal Humours that they become much more acrid in Autumn than in the Spring-Season: This is that Aduotion of the Blood, which the Ancients so often talk of, for hence a great Quantity of acrid Bile is generated; whence Cholera, Dysentery, bilious Colics, putrid and malignant Fevers, are so frequent in the Autumn.—The Heat of the torrid Zone so exhausts the Liquids of the Inhabitants, and so crisps up their Fibres, that they look as if quite burnt up.—From the Relation of Physicians, who have practised in those Parts, their Blood is found much more thick and black than that of the *Europeans*; hence most ardent and pestilential Fevers are endemic in such Climates, the Humours growing putrid on the slightest Occasion.

The

The great Dictator in Medicine, *Hippocrates*, asserts that not only the Diseases, but also the Temperaments and very Manners of Men, depend greatly on the various Constitutions of the Air, in his most elegant Book on Air, Water, and Situations, and with him agrees his faithful Interpreter *Galen* in his Commentaries, and elsewhere, particularly in his Chapter "Ὅτι τὰ τῆς ψυχῆς ἥθη, &c. — This also *Lucretius* very elegantly hints at, Lib. vi.

"Nam quid *Britannum* Cœlum differre
"putamus,

"Et quod in *Ægypto* 'st, qua Mundi
"claudicat axis?" &c.

And a little lower he assigns this Reason for it,

"Varius concinnat id Aër."

But, if the various Temperature of the Air in different Climates produces Diseases altogether different, why should not different Tempers of the Air, even in the same Country, produce also different Affections of the Body? And so in Truth it happens, for Instance, in the Spring-Season, especially if dry, north-easterly Winds continue a long Time, inflammatory Fevers, Pleurifies, Peripneumonies, Squinries most certainly prevail. — In Autumn on the contrary slow and putrid Fevers, Quartans, Cholerae, Dysenteries, almost always rage. — Thus in like Manner humid, warm Weather brings on quite different Disorders from such as are found in
cold

cold and dry : Observations of this Kind have been constant from the Age of *Hippocrates* to this very Day, and manifestly confirm all the above Doctrine.—“ Non quod non omni Tempestatum Genere Homines, per omnia Genera Morborum & ægrotent, & moriantur, sed quod frequentius tamen quædam eveniunt;” thus *Celsus*, the *Latin Hippocrates*, Lib. 11. in Præfat. That without Doubt is the most wholesome Constitution of the Air, which from the established Order of Nature is most agreeable to the Season, therefore a warm Winter is not salutary, nor a rainy Summer.

But, seeing different Constitutions of the Atmosphere affect the human Body in different Ways, the Manner and Degree of this Diversity should be well considered by Physicians; for what *Celsus* says of Difference of Places is equally true of Difference of Seasons, “ Differre nempe pro Natura Locorum Genera Medicinæ, & aliud opus esse *Romæ*, aliud in *Ægypto*, aliud in *Gallia*.”—This the Physicians of different Countries abundantly testify by using different Methods, all which however very happily succeed. Is it not necessary therefore to have a due Regard to the different Constitutions of the Atmosphere even in the same Country? That diligent and excellent Observer *Sydenham* hath noted, that the same Method, which relieves the Sick in the Spring, perhaps

perhaps will destroy them in the Autumn. Physicians are unanimous in declaring that Spring Diseases bear Bleeding much better than the Autumnal.—Hence perhaps *Sydenham's* Lamentation, who was very fond of Bleeding always.—Diseases even of the same Species (as I have constantly observed) require much larger Bleeding, and the Sick bear it much better, in dry Weather, when the Barometer stands high, than when a hot, moist Air almost destroys the Tone of the Vessels: This is constantly observable even in Diseases of the Breast. *Asclepiades* of old, as *Cælius Aurelianus* tells us, observed “Apud *Athenas*, atque Urbem *Romanam*, Phlebotomia vexatos (I use the “very Words of *Aurelianus*) vel pejús acceptos “esse Pleuríticos, in *Paro* vero atque *Hellepont* “*spontó* resumptos, ac relevatos,” — because *Rome* and *Athens* lay in a much warmer and moister Air than the Region of the *Hellepont*, which is blown over by the dry and often very cold Winds from *Asia*.

Robust and strong Persons indeed easily bear Bleeding, but those of a very lax Habit do not, though equally full of Humours; this happens because weak Fibres cannot so soon restore an Equilibrium between the Solids and the Fluids, whence a short Stagnation as it were follows. But a great Weight of the Atmosphere strongly compresses the whole
Habit

Habit of the Body and corroborates it, and thus quickens the Motion of the Blood; Cold, especially a dry Cold, greatly strengthens the Fibres and natural Force, so that the very Habit of the Body seems to be changed as it were for a Time; hence, in such a Constitution of the Air, even the Infirm easily bear some Degree of Bleeding.

The Consideration of the Constitution of the Atmosphere is not only useful in curing Diseases, but of very great Moment also in preserving of Health, *Contraria Contrariis curantur*, as the Proverb says; thus when the Spring is cold and dry we are in Danger of Peripneumonies, Pleurifies, and Squinzeys, but they who use a moistening Diet, and warm relaxing Diluents, counteract the faulty Temperature of the Air, and generally escape these Disorders. But if the Air is not only cold, but moist also, something of a cordial Nature is to be added, and the Body ought to be well cloathed that Perspiration may not be too much hindered.—A moist and sultry Constitution of the Air on the Contrary requires a dry and astringent Diet, which may strengthen the Fibres and prevent a Lentor and Putridity of the Blood.—The Cold-Bath is then also exceeding proper, but such Things as abound in Moisture and Warmth the Reverse,

verfe, at fuch Seasons therefore warm Soups, Gruel, and Tea are to be avoided.

It is certain there is no Time of the Year in which Difeaſes do not attack People, in Autumn however more eſpecially there are very many, for then as *Celfus* rightly ſays, Lib. ii, C. 1. “ Meridianis Temporibus Calor, nocturnis atque matutinis, ſimulque etiam vespertinis, Frigus eſt, Corpus ergo ſubinde meridianis Caloribus relaxatum ſubito Frigore excipitur.”—Sanctorius moreover obſerves, that from the Autumnal Equinox to the Winter Solſtice we perſpire nearly a Pound leſs daily, ſo much do the Autumnal Colds leſſen Perſpiration; and the Body is ſo much the more obnoxious to this Miſchief, as it was the more relaxed by the Summer-Heat, and its Veſſels, on that Account, did not duely propel the contained Fluids; which thence alſo contracted a greater Lentor daily.

If to all this we add likewise how much the Heat of Summer may have over digeſted the Humours, and made them more acrid, we ſhall not be ſurpriſed if the Autumn is fatal to a great many not ſufficiently cautious; for then the Blood is more acrimonious than ordinary, and the Perſpiration greatly hindered.

Theſe Things being well conſidered, the prophylactic Method ſeems very obvious, to wit, ſuch as corroborates the Fibres and keeps
on

on a due Flow of the Blood, by which Perspiration may be carried on in a regular and constant Manner.—But, in my Opinion, there should be now and then also interposed some gentle Laxative to carry off the bilious Corruption: This indeed provident Nature often effects by a Diarrhœa, Cholera, or Dysentery, which a seasonable Dose of Rhubarb, now and then administered, might have altogether prevented, and yet relieved Nature as well.

I might add a vast Deal more of this Kind, but it would be too tedious, and is sufficiently obvious to the intelligent Readers; none of whom, I believe, at present doubt but that a diligent Contemplation of the Atmosphere may be exceeding useful to Physicians.

As to the Method and Medicines, which, in the Course of this Work, I have recommended in various Diseases, they are not vain Speculations made in my Study, but which, experienced by a long Practice, I have found very successful; nay, if that may be anything to the Purpose, such as I have often given to Persons of Consequence and Distinction, such a Confidence had I in their Efficacy after having sufficiently tried them.

I have given no formal Prescriptions of Medicines, as I think it favours more of Pomp and Ostentation than real Use.—He only, who thoroughly understands the Nature of the
Disease,

Disease, knows truly what Medicines it requires. I have met with many, who could readily babble over the whole Pharmacopœia, that did not so much as understand even the very Pulse. A simple and neat Method of Prescription indeed I admire, but not a Hotch-Potch of Medicines, fetched from all Corners of the Earth, and many Times prescribed for the Sake of Novelty.—But vastly more ridiculous is the Practice of such, who rashly proclaim and exhibit their Nostrums or Arcanums as good in all Kinds of Disorders, as if it was in the Nature of Things, that the self-same Medicine, whatever it may be, should be beneficial in a Habit of Body too greatly constricted, and yet be equally useful in a too relaxed State of it — that it should equally quench the Fire of a burning Fever, and cure the slow cold Dropsy.—But away with these Trifles.

“ Si Populus vult decipi, decipiatur——

“ Hæc tu Romane caveto! Sed Romæ
 “ quis non?”— *Perf.*

The following Observations have been made on the Plan, which the very celebrated Dr. *James Jurin* published in *Philosoph. Transact.* No. 379, which every one now follows, particularly the very highly esteemed Society of *Edinburgh*.—And accordingly my Barometer is a large Tube filled with Quicksilver, which
 I had

I had well purified by Distillation, fixed in a very large Cistern full of Quicksilver.—I have used a Thermometer of *Haukſbee's* Conſtruction, which is fixed in a proper Room.—The Barometer till the Month of *July*, 1733, ſtood about 46 Feet above low Water Mark, but, from that Year and Month to this very Time, only at 30 Feet.—The Moiſture of the Air I have noted by various Hygroſcopes, but the Chief is that made in the Manner given by Dr. *Molineux*, Philoſoph. Tranſact. No. 172. I uſe a circular Funnel to receive the Rain 25 Inches in Diameter, which is ſo placed as to be equally expoſed to every Wind.

The following Scheme of the Winds I have taken out of *Pliny*, that it might be the better known out of what Part of the Heaven the Wind blew, when I uſe ſuch or ſuch a Name; but when I note both the Strength of the Wind, and its Direction, I uſe the Letters commonly inſcribed on the Mariner's Compaſs, as E. W. N. S.—and the Compounds NE. NW. SE. SW. &c.

I well know indeed that *Varro* deſcribes 12 Winds, and *Vitruvius* even 24, and diſtinguiſhes them by a ſtrange kind of Names, of which he was very fond; but this Table of *Pliny*, or as he calls it *Tympanum circinatum*, is ſufficient for a general Diſtinction of the Winds—beſides the Names, that *Pliny* gives them, were thoſe commonly uſed by the *Romans*.—It is true.

Favorinus, as quoted by *Aulus Gellius*, differs from *Pliny* in the Words *Eurus*, *Caurus*, or *Argestes*, *Africus* *sive* *Libs*, for he refers *Eurus* to the *Æquinoctial* Rising of the Sun, but *Pliny* and *Seneca* to the Rising of the Sun at the Winter-Solstice ; and they have the Authority of *Aristotle*, Lib. ii. Μετεωρ. Cap. 6. who expressly says, Εὖρος 'απ' 'Ανατολῆς χειμερινῆς πνεῖ. — So in the Book, περὶ Κοσμῶ, Cap. 4. commonly (tho' wrongly) ascribed to *Aristotle*, Εὖρος δὲ ὁ ἀπὸ τῆς περὶ τὰς χειμερινῶς, &c. — *Seneca* doubts also whether *Argestes* is the same with *Corus*, yea *Favorinus* says that *Argestes*, or *Corus*, blows against the N N E. Wind, and that *Libs*, or *Africus*, blows against the S E. — But perhaps this Place in *Aulus Gellius* is corrupted; for no one ever before placed *Corus* between the South and the West; and how can *Africus* blow from *Africa* to *Italy*, but from the Southern Quarters?—The same may be said of *Libs*, as it blows from *Libya* to *Greece*, whence it was called Λίψ. Hear *Aristotle* again in the Place mentioned of the Enumeration of the Winds, Ἀργέτης ἀπὸ Δυσμῆς Θερυνῆς πνεῖ. — Λίψ ἀπὸ Δυσμῆς χειμερινῆς. — What if *Corus* is derived from the *Hebrew* Word כֶּזַח, Cold; for it was always reckoned amongst the cold Winds? Thus *Virgil* Lib. iii. Georg. v. 356. — “Semper spirantes Frigora Cauri.” *Argestes* is thus mentioned likewise by *Ovid* Lib. v. Fastor.

“Frigidus

“ Frigidus Argestes summas mulcebit
“ Aristas.”

The Town of *Plymouth* is situated at the Bottom of a very large Bay, lying quite open to the southerly Winds; on the East and West it is sheltered by very high Cliffs, at the Bottom it is terminated by Marble-Rocks, yet so as that an Arm of the Sea runs up a great Way into the Country on each Side of it: From the Bottom of the Bay the Country rises continually till you come to the *Dartmoor*-Mountains at about ten Miles distant from the Town.—I have therefore described the Situation of the Town, that, amongst other Things, some Reason perhaps may be assigned why there falls such a great Quantity of Rain here yearly.—For from the Main-Sea lies an Opening to the Clouds and Vapours between two lofty Promontories, and high Cliffs, which being blown against the Rocks, and Mountains at the Bottom of the Bay, are at length condensed, and fall in Rain. I might here also mention (a Thing of some Consequence) that this Part of the Kingdom is stretched out a great Way between two Seas in the Form of an Isthmus, as it were.

I have been the more willing to publish these Meteorological Observations, as I thought they might be the more useful, nothing of this Kind having been, as far I know, at-

tempted before in this western Part of our Island.—But from the Nature of the Work I have chosen to write it, rather in *Latin*, than *English*, being a common Language to all Men of Letters, in which we may communicate our Observations to Foreigners, and they to us.—Several Attempts of this Kind are now carrying on in most Parts of the World; I heartily wish that, from very many and long continued Observations of this Kind made in most Parts of the Earth, some general and perfect History of the Atmosphere may at length be accomplished: A Work certainly long and much desired.—I throw therefore this Mite into the public Treasury; in which I have used much more Diligence than Elegance, for I write as a Physician, and not as an Orator.

“ Non nobis licet esse tam disertis,
“ Qui musas colimus severiores.”—

Martial.



The following Marks, which frequently occur in this Work, are thus to be explained:

AB. signifies a northern Light, as it is called, or an Aurora Borealis : *viz.* you see in the Month of *March*, 1728, *AB.* 22, 10 p. m. W N W 1, which is thus to be read—An Aurora Borealis the 22d of *March*, 10 at Night, a gentle Breeze of Wind from W N W.

— This Mark set over a Day, in which Rain fell, signifies that in that Day there was some Quantity of Rain fell.

— That there fell a considerable Quantity.

— That there was a greater Rain.

— That there was a continual and heavy Rain.

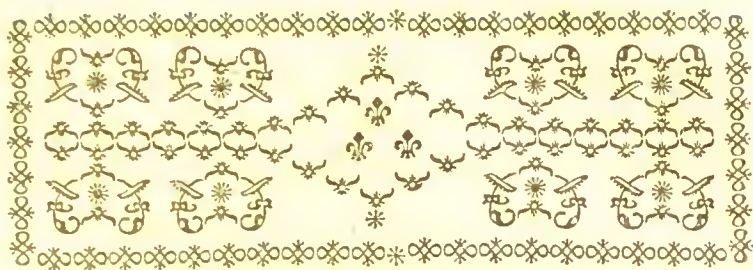
Where the Numbers of the Days are joined thus, 12—16, it denotes that some Rain fell every Day from the 12th to the 16th.

* At the Head of a Figure denotes the Wind of that Order to be strong, but at the Bottom of the Figure to be weak, so that 4* indicates a violent Storm.

I use the *Julian*, or old Style, throughout.

The Observations were taken about 8 in the Morning, and 6 in the Evening.

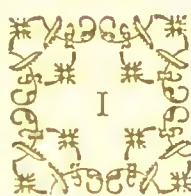
The *Roman* Letters, (A) (B) (C) &c. refer to the Notations scattered up and down the Work.



OBSERVATIONS

ON THE

AIR and EPIDEMIC DISEASES.

N the Year 1727, a very hot Summer, remarkable for an immense Quantity of Caterpillars, was succeeded by a Winter sufficiently rainy, but not very unseasonable; the Month of *November* however was very dry, but the Atmosphere very thick and cloudy, the Mercury in the Baroscope then stood very high, the Wind for the most Part easterly, or northerly, and yet it did not produce a seasonable Frost.—The Barometer sinking, a vast Deal of Rain fell the Beginning of *December*; but the Mercury soon rose again, and a smart Frost came on from the 18th to the 22d.—Rain from thence to the End of the Month.

The Measles, which had disappeared in *July* and *August*, returned about the Middle of *September*, and daily seized many Persons, and were of a very bad Kind in *October* and *November*;—with these a convulsive Cough kept Pace, and greatly raged amongst Childrēn.—In the Months of *October*, and *November*, also not a few laboured under a slow, nervous Fever—and a most violent Cough affected almost all our Horses (A), which continued till the End of *December*; few however died of it.

Thus ended the Year 1727; a short Account of which I have cursorily given, that by it perhaps we may be the better enabled to guess at the Causes of the following Diseases; for, in our Enquiries into the Nature of Epidemics, we should not only consider, as *Celsus* says, “*Quales Dies sint, sed & quales etiam*” “*præcesserint ante.*” (B) Lib. ii. Cap. i.

The whole Quantity of Rain, that fell this Year, is as follows :

	Inches.	Tenths.		Inches.	Tenths.
In <i>January</i> ,	2.	965	— In <i>February</i> ,	4.	452
— <i>March</i> ,	1.	868	— <i>April</i> ,	1.	511
— <i>May</i> ,	5.	902	— <i>June</i> ,	2.	483
— <i>July</i> ,	1.	080	— <i>August</i> ,	0.	299
— <i>September</i> ,	3.	867	— <i>October</i> ,	2.	490
— <i>November</i> ,	0.	826	— <i>December</i> ,	4.	172

The whole Quantity 31. 915

Some short Notes.

(A) At the Siege of *Troy* first the Dogs, then Mules, and afterwards Men were seized with the Plague; I have more than once observed a Disease break out first amongst the Cattle, and some Time after rage in an epidemic Manner amongst the human Species; this was most manifest in the Years 1728 and 1733, in which a most vehement Cough seized almost all the Horses about a Month, or two, before it attacked Mankind.

For, as this Kind of Animals is most commonly exposed to the open Air, it must necessarily be subject to the noxious Qualities of the Atmosphere, not only by breathing in the polluted Air, and perhaps imbibing it by the Pores of the Skin, but by drinking Water and eating Grass they suck up the condensed Atmosphere, in the Form of Dew, with all its morbid Particles; for as *Lucretius* says, Lib. vi. “Aut in Aquas cadit, aut Fruges perdidit in
“*ipsas, Pestilitas.*”

Hence it is perhaps that such Kinds of Epidemic Diseases are much sooner, and more frequently found amongst the Country People than amidst the Inhabitants of Towns and Cities; for in these Places the continual Fires, and Concourse of People, greatly change the heavy noxious Air, or totally dispel it; till at
length

length it may be so loaded with morbid Effluvia as to break in like a Torrent, and rush into all Places.—What seems to confirm this is, that such, as kept constantly in good warm Houses, were very seldom affected with the Epidemic Disorders of 1728 and 1733.

(B) It is certain the Atmosphere was very thick and much loaded with Vapours from the very Beginning of Autumn, which the very great Heat of the Summer had elevated, which, though here so condensed, that they fell in frequent Rains in *September* and *October*, and so did not so much pollute our Air with Vapours, yet in other Places the Atmosphere was then excessively thick, and the Season of Course very unhealthy.—Indeed here, the Air, during the Month of *November*, was exceeding thick and heavy, as being stuffed and obscured by the footy Vapours exhaled from the parched Earth.—And hence the Pressure of the Atmosphere was found then so great, not from its own pure and proper Elasticity and Gravity, which would have carried the Vapours higher, and more equably dispersed them.

They who only consider the present Face of the Atmosphere in searching into the Nature of Epidemic Diseases, and do not look back to the past also, see very little into the Causes and Nature thereof: For Example, a dry and cold Constitution of the Air doth not bring on too
great

great a Rigidity of the Fibres, and a morbid Density of the Blood in a Day, or two, nor unless it continues so for several Days together. You very seldom see any great, or pestilent Fever become very epidemical unless some peculiar Constitution of the Atmosphere hath continued long. When the Constitutions of the Atmosphere are frequently changing, now perhaps a dry, cold, north-easterly Wind too much corrugates the Fibres, in a Day or two a rainy South-Wind may come on, and too much relax them; so that by the Contrast a Sort of Equilibrium is kept up, and Health with it; and that especially if Persons are careful to guard themselves well against these sudden Changes.

I have several Times noted epidemic Fevers greatly abate, both as to Number and Violence, after Storms, and heavy Rains, the contagious Effluvia and morbid Congestions of the Atmosphere being this Way dispersed.—For this Reason probably *Augustus Cæsar* built, and dedicated a Temple to *Circius*, a most violent Wind; and the People of *Gaul*, as *Seneca* tells us, gave public Thanks to this exceedingly tempestuous Wind, though it frequently blew down their Houses, but at the same Time it cleared their Air, and made them healthy.—
 “*Quæstion. Natural. Lib. v. Cap. 17.*”



OF THE CONSTITUTION

OF THE
AIR, and EPIDEMIC DISEASES,
In the YEAR 1728.

JANUARY.



Very rainy, moist (A) Season ushered in this Year, for in this Month fell no, less than 6 Inches, 108 Dec. of Rain, an immense Quantity! There was also some Snow, very little Frost, but Storm enough. The Mercury in the Baroscope sunk very greatly, from the 1st Day to the 21st it was often below 29.0. The Wind was for the most Part southerly, or from the West, and that often stormy: Near the End of the Month however a south-east Wind, and sometimes a north-east, rose the Barometer, and scattered the Clouds, now and then Frost and Snow intervening

1728.] *Of the Constitution, &c.* 7

tervening.—From the 26th to the 28th much Rain fell, though the Baroscope was at 30.0. and higher, a south-east Wind blowing: An Argument that the Atmosphere was still loaded with Vapours.

Rain on $\frac{''}{1}$ to the $\frac{'''}{6}$ — $\frac{''}{8}$ — $\frac{'}{10}$. $\frac{'''}{13}$. $\frac{''}{14}$. 16. $\frac{''}{17}$. $\frac{'''}{18}$. $\frac{''''}{19}$ —22. 26. $\frac{''}{28}$.

Vehement Hail Showers 15th p. m. a great Snow 23. a. m. E N E 3.

The whole Quantity of Water collected was 6 Inches, 108 Dec.

Very great overflowing Tides (B) 18th and 19th S S E 3°. Barom. 28.5.

Greatest Height of the Barom.	31ft. 30.2.	E b N 2.	}
Least	18th. 28.5.	S S E 3°.	
Mean Altitude	29. $3\frac{1}{3}\frac{7}{4}$.		}
The coldest Day	25. <i>Haukſbee's</i> Therm.	69. N N W 1.	
— warmest —	3.	50. S W 1.	}
Temperature of the Air, at a Medium,	56 $\frac{5}{3}\frac{1}{4}$.		

From the Beginning of the Month Coughs and Catarrhs were very frequent, oftentimes attended with a troublesome Tumor of the Fauces, and a slight Fever commonly. Rheumatisms and Squinzies up and down; great Lowness of Spirits, and frequent hysteric Paroxysms every-where.

F E B R U A R Y.

The Quicksilver continued at a high Station from the Beginning of *February* to the 18th, during

during which Time the Winds were mostly northerly, which rendered the Heavens dry and clear, and the Earth bound up with Frost, especially at the Beginning of the Month.— After the 18th Snow, Rain, and the Wind for the most Part southerly, and the Air became much more mild and moist, a heavy Rain falling near the End.

Rain	13.	18.	$\frac{11}{20}$.	$\frac{11}{21}$.	$\frac{11}{22}$.	$\frac{11}{23}$.	$\frac{1}{25}$.	Inch. Dec.
Much Snow	19.	—	—	—	—	—	—	} = 1.924.

A small Aurora Borealis 26, 9 p. m. E b N 1.

Greatest Height of the Barom.	2.	30.3	E N E	3.	} Middle		
Least	—	—	20.	29.0		W S W	2.
The coldest Day	1.	67.	N E	2.	} The mean Warmth 57 $\frac{1}{2}$ $\frac{6}{9}$.		
— warmest —	25.	47.	S	1.			

Coughs (C), which from the Beginning of *January* were very frequent, are now become very epidemical, and very troublesome to many, especially the younger Sort of People, who are affected with great Rheums, Pains of the Teeth and Fauces, with Swellings of the parotid and maxillary Glands.— Almost all these Symptoms were common in *January*, but now with these comes on a feverish Habit, and difficult Respiration, nay many in the Middle of this Month were seized with Pleurifies and Peripneumonies, whose Blood was viscid and had too little Serum, and yet, in *January*, Blood drawn even from those labouring under Rheumatisms was seldom very glutinous. Then
also

also the Exhibition of Sp. Vol. Oleos. the asthmatic Elixir of *Le Mort*, and the like out of the milder Diluents to promote Sweat, and moderate the Cough, was sufficient—seldom finding it necessary to bleed nor often to apply Epispastics;—whereas now it was often necessary to bleed, and appease the Violence of the Cough with frequent Anodynes, and also to promote Expectoration, and ease the Respiration by giving large Quantities of soft, pectoral, deterging Drinks; to which Ends also we were obliged to have Recourse to oily Medicines, Gum. Ammoniac. Oxym. Scillit. &c. yet was it at the same Time requisite to support the languid Spirits with proper Cordials, and often during all this to apply Epispastics; for the Fever for the most Part was of the slow Kind, and in it the Urine was seldom very high-coloured, nor was the Tongue very dry, nor the Thirst great.

In this Month likewise the Small-Pox were up and down the Country, but mild and seldom fatal.

M A R C H.

The prevailing Wind in *March* was westerly, veering unto the North, now to the South, causing, as usual, Rain, or Sunshine, *viz.* such Weather as commonly attends such, or such Wind. The Mercury in the Barometer
was

was unfettled, feldom high: Fogs often, fometimes Storms; a little Snow towards the End of the Month. The Constitution of the Air was thick and moift, but not very cold.

Rain 1. 3. 6. 8. $\frac{''}{9}$. 11. $\frac{'}{13}$. 14. 16—
18. $\frac{''''}{19}$. 20. 22. 24—26—29 = $\frac{''''}{3}$ 317. Dig. Dec.

Storms 14. 15. S 4. with very high Tides.
Snow in the Morning 27.

An Aurora Borealis 22. 10. p. m. W N W 1
— a fmaller 23. 8 p. m. N N W 1. a very
great Halo about the Moon 11. 12.

Greatest Height of the Barom.	3.	30.2.	a Calm	} Mean Alt.
Least — — — —	14.	29.1.	S 4.	
Coldest Day 27. 60. N N W	3.			
Warmest — 17. 45. W 2.				} Mean Altitude 49 $\frac{2}{3}$.

Coughs vastly common all this Month, generally attended with a flicht Fever: Very many rheumatic and catarrhal Fevers; all the Sick are very prone to Sweats.

Exquifite tertian (D), and femitertian, Fevers are now much more frequent in this Country than ufual, bilious, green, Vomitings with an immense Quantity of tough Phlegm are urgent in the Paroxyfms, and alfo great Head-ach and fometimes Delirium; very few Small-Pox now; feveral, both Children and Adults, are feized with a Kind of Chicken-Pox.

A P R I L.

Much Rain at the Beginning of the Month with a Fall of the Barometer; some clear Weather about the Middle, the Mercury rising again, yet the Air was still thick and foggy—From the 19th to the End there was much Rain, scarce a Day without it, the Barometer generally low.—The Atmosphere was very thick, moist, and coldish almost all the Month, the Wind was often westerly, very often a stormy South-Wind. The public Roads are all full of Water and Mud.

Rain	1	—	^{'''} 3	—	^{''} 5	.	['] 8	.	['] 9	.	13	.	^{'''} 19	.	['] 20	.	} = 4.153.
	^{'''} 21	.	22	.	23	.	25	.	26	.	^{''} 28	—	['] 30	.			
Hail	11	.	12	.	WNW	1											

Greatest Alt. Barom.	16.	30.0.	a Calm.	} Mean 29.5 ⁵ / ₈ .
Least	—	29.	28.9.	
Coldest Day	11.	55.	NW 1.	} Mean Heat 45 ¹ / ₂ .
Warmest	18.	36.	SSW 1.	

The Diseases of the preceding Month are now greatly increased in Strength and Number, and the intermittent Fevers now, from a slight Error in Regimen, run into a Kind of putrid Fevers frequently, to the no small Danger of the Sick—Besides those, who had been intirely free from them for some Time, relapse.

E

M A Y.

M A Y.

The moist Constitution of the Air, and southerly Wind, continued to Mid-May almost. In the Beginning the Mercury was low: From the 16th, a North-West or North-Wind blowing gently kept the Barometer up to about 29.8. till the End. In the mean Time the Air was dry and somewhat warm.

Rain $\frac{''}{1}$. $\frac{''}{2}$. — $\frac{''}{5}$. 9. 10. $\frac{'}{12}$. 15. $\frac{'}{18}$. 20. 21
 Dig. Dec.
 = 1.633.

Barom. greatest Height 21. 30.0. a Calm. } Mean Alt.
 Least ———— 3. 28.9. S S E, 3. } 29.6 $\frac{1}{3}$.
 Coldest Day 1. 46. S b W 3. }
 Warmest — 23. 30. W N W 1. } Mean Alt. 35 $\frac{1}{2}$.

The Catarrhal Fever and Coughs are now almost gone, but intermittent Fevers still rage : There are now scarce any Small-Pox.

J U N E.

Southerly and westerly Winds blew the former Part of this Month, and not a little Rain fell ; the Atmosphere was generally thick and moist ; the Baroscope kept a middle Station : The latter Part of the Month was more serene, dry and warm, the Wind from the East, on the northern Points.

Rain $\frac{'}{1}$. 2. 4. 7. $\frac{'}{8}$. $\frac{'}{9}$. $\frac{'}{11}$. $\frac{''}{12}$. 17. $\frac{'}{20}$.
 Dig. Dec.
 25. 26 = 1.636.

Thunder and Lightning 17.26.

Greatest

Greatest Altit.	Barom.	28. 29.8. N 1.	} Mean Alt.
Least	————	8. 29.2. S W b S 2.	
Coldest Day	10. 37.	W N W 1.	} Mean Alt. 30 $\frac{1}{2}$.
Warmest —	29. 23.	E S E 1.	

Intermittent Fevers still up and down, and some of the putrid, slow, nervous Kind.

J U L Y.

The Beginning of the Month was fair, dry and hot, sometimes little or no Wind, sometimes from the East-South-East; very great Dews; the Mercury falling the 9th and 10th, there was much Rain, but soon rising again it grew serene; then sinking lower there was heavy Rain the 15th and 16th, from thence the Weather was various to the End of the Month, the Wind commonly bending to the West; the Air in the mean Time became much more moist, and, at the End, very thick.

Rain	$\frac{''}{9}$	$\frac{''}{10}$	$\frac{''}{15}$	$\frac{''}{16}$	17.	18.	$\frac{'''}{20}$	$\frac{'}{25}$	$\frac{''}{26}$
	Dig. Dec.								
28. 30 =	3.179.								

On the 2d of the Month, 11. p. m. no Wind, I observed a very great northern Light, the lucid, variegated, vibrating Rays of which seemed to be terminated in a bright, shining Umbrella as it were, which was about 8, or 10, Degrees to the Southward of the Zenith — the Center of this lucid Corona was about 8,

or 10, Degrees likewise to the East of the Meridian; which is what I have also several Times lately observed—during this bright Appearance much Dew fell, and the Wind, if any, was from the North.

The 22d H. 9. p. m. N 1. a small, but uncommon, Aurora Borealis, its pyramidal Rays vibrated in a contrary Manner to what is usual, *viz.* the Points of the Rays converged as it were to a Center somewhat below the Horizon, directly under the North-Pole.—Small northern Lights the 4th and 17th, W N W 1, but nothing uncommon: Thunder the 8th.

Greatest Altitude of ☿	3.	29.9.	a Calm.	} Mean 29.6.
Least ———	——	16.	29.0. S W 1.	
Coldest Day	20.	37.	E 1.	} Mean Altit. Therm. 28 $\frac{1}{3}$.
Hottest ———	7.	18.	E S E 2.	

Tertians, and double Tertians as yet, some putrid Fevers. People grow exceeding faint from the profuse Sweats, which infest every one—the Humours, being as it were colliquated and rarefied by the Heat of the Season, run off immoderately through the relaxed, open, Pores of the Skin.

AUGUST.

Fair Weather at the Beginning of *August*, the Air dry, and fervid; the Barometer high, the Winds northerly; however, towards the End of the Month, the Air became much more moist, and Rain fell with the Mercury; in the

mean Time the west-south-west, or north-west,
Winds blew constantly.

Rain 1. 11. $\frac{11}{13}$. 17. $\frac{11}{20-22}$. $\frac{1}{24-27}$.

$\frac{11}{28}$. 29 = 1.894.
Dig. Dec.

AB. 18. 10. p. m. N N W 1. a Storm with
Lightning 20 at Night S W.

A very high Tide 27. S S W 3—28 S W 3^x.

Greatest Height 8 9. 30.1. N b W 1. } Mean 29.6 $\frac{2}{3}$ ₁.
Least ——— 28. 29.0. S W 3^x. }
Coldest Day 29. 38. N W 1. }
Hottest ——— 5. 20. W N W 1. } Mean Alt. Therm. 30 $\frac{4}{3}$ ₁.

Intermittent Fevers more frequent towards
the End of the Month : Many labour under
a Looseness and Colic.

S E P T E M B E R.

A north-west Wind blew almost daily from
the Beginning to the 11th, and raised the Baro-
meter, scattered the Clouds, and produced fine
Weather. From the 17th to the very End of
the Month an easterly Wind, veering now to
the North, now to the South, often blew vio-
lently, and sunk the Barometer more than
one would have thought, as little Rain fell ;
the Air in the mean Time was moist and cold.

Rain 4. 6—8. 10. $\frac{1}{16}$. $\frac{11}{17}$. 18. $\frac{11}{23}$. 25.

Dig. Dec.
26 = 1.526.

E 3

Very

Very high Tides from the 22d to the 25th,
a furious south-east Wind.

Greatest Altitude \times 10. 30.0. N W 1. } Mean $29.5\frac{2}{3}$.
Least ————— 24. 28.5. S E b E 3 \times . }
Coldest Day 20. 46. E b N 3. } Mean Therm. Heat $38\frac{1}{3}$.
Warmest — 1. 27. calm. }

Intermittent Fevers up and down, and some
putrid: Fluxes of the Belly in Abundance,
but Colics more seldom than usual at this Sea-
son — not a few are seized with Inflammations
of the Eyes, and Tumours of the Neck and
Throat.

O C T O B E R.

A south-west Wind constantly from the 2d
to the 13th of *October*; the Baroscope sinking
much, in the mean Time continual Rain;
afterwards the Wind was from the N E, or S E,
till the 27th, the Mercury rising and the Sky
cleared up — from that Time the moist South-
Wind sent down heavy and continual Rain.

Rain $\frac{''}{2}$. $\frac{''}{3}$ — $\frac{''}{6}$. $\frac{''}{7}$. $\frac{''}{8}$ —10. 12. $\frac{'''}{13}$. 20. $\frac{''}{21}$.

$\frac{''}{24}$. $\frac{''}{28}$. $\frac{'''}{29}$. $\frac{''}{30}$ = 5.386. Dig. Dec.

AB. 1. 8. p. m. N N E 1. a small one 14.
9. p. m. N E 2—15. N N E 1—22d E N E 1.

Greatest Height \times 16. 30.2 N N E 1. } Mean $29.5\frac{4}{3}$.
Least ————— 8. 28.8 S W 2. }
Coldest Day 16. 55. N N E 1. } Mean of the Therm. $46\frac{1}{3}$.
Warmest — 2. 40. S S W 2. }

Petechial Fevers here and there, and some Erysipelatose.

N O V E M B E R.

A perpetual, but not a heavy, Rain till the 9th of *November*, the Air very moist; the South-Wind generally raging greatly, then the North-Wind scattered the Clouds a little—thence a shifting westerly Wind, veered about by the South, till it reached the East, the Face of the Heaven, and Station of the Barometer, changing daily; but, bending afterwards to the North, it brought on a severe cold, and serene Weather.

Rain 1. $\frac{1}{2}$. $\frac{1}{3}$. $\frac{1}{8}$. 9. $\frac{1}{14}$. $\frac{1}{16}$. $\frac{1}{18}$ —20. 22.
 $\frac{1}{24}$. $\frac{1}{25}$ = 3.535.
 Dig. Dec.

A Storm early 1st W S W — 15. at Night S b E—18. in the Afternoon S S E 4^x.

A small *AB*. 22. a very great and vivid Halo round the Moon 6. 10. p. m. S 3. a vastly great Tide 18 S S E 4^x.

Greatest Height 8 30. 30.2. a Calm. Least ————— 25. 28.8. E S E 3. Coldest Day 30. 72. a most severe Frost. Warmest — 7. 42. S S W 3.	}	Mean 29.5 $\frac{1}{5}$. Mean Altit. 54 $\frac{1}{3}$.
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A Murrain amongst the horned Cattle; Colds, Catarrhs, and Coughs, are very frequent.

D E C E M B E R.

The Baroscope sunk gradually from the Beginning of this Month, much Rain falling; the Wind in the mean Time was variable daily, but the Atmosphere was vastly humid; till at length the North-Wind changed the Face of Things, and brought on a very rigid Frost and Snow—and this an easterly Wind continued to the very End of the Year.

Rain $\frac{1}{3}$. $\frac{1}{4}$. $\frac{1}{5}$ — $\frac{1}{7}$. $\frac{1}{8}$. $\frac{1}{10}$. 12. Snow 17.
 $\frac{1}{25}$ Dig. Dec.
 18. 21. 23. 24. 25 = 2.273.

A great Part of the Snow was blown off, which I could not collect, for freezing in the Recipient, and filling it, it was afterwards blown quite away—but the Quantity would otherwise have been very considerable undoubtedly, as it lay on the Ground every-where at least 16 Inches deep.

The greatest Height $\frac{1}{8}$ 15. 30.3. N 1. } Mean 29.73 $\frac{1}{2}$.
 — least — 8. 28.8. S b W 3. }
 Coldest Day 23. 75. N E 2. } Mean Altit. Therm. 64.
 Warmest — 7. 52. S S W 3. }

Rheumatic Fevers up and down, and frequent asthmatic Paroxysms; Abundance of very severe Coughs, towards the End of the Month especially.

The whole Quantity of Rain-Water collected this Year was = 36.564.
 Dig. Dec.

Some

Some Notes on the precedent Observations.

(A) Perhaps the Want of the usual Frost occasioned the very great Humidity of the Air: Frost certainly renders the Atmosphere dry by condensing the Vapours, and binding them as it were to the Earth.—The Earth itself, in the mean While, is so bound up by the Frost that it emits few, or no Exhalations. This is very evident in the Thaw, when all the Ground grows moist as if watered, nay even almost foams as it were, a Way now being given to the Vapours elevated by the subterranean Heat, which before were bound fast by the Frost to the Surface of the Earth.—Hence it is that a long Frost fertilizes the Earth as Husband-Men observe, the saline and sulphureous Vapours being detained by it.—And perhaps hence it is also, that when a Thaw comes on, after a long Frost, epidemic Fevers break out, as is very often observed.

(B) Were not these greatly overflowing Tides partly perhaps owing to the very great Levity of the Atmosphere in these Parts, which pressed much less on our Seas than on the circumambient Ocean, whence a Confluence of the Waters here to restore the general Equilibrium? For since the Difference as to Weight between Quicksilver and Water is very nearly as 14 to 1, it manifestly follows, that when the Mercury,

cury, in the Barometer, sinks a whole Inch here, our Seas ought to rise 14 Inches higher than where the Pressure of the Atmosphere is greater in the aforesaid Ratio. And is it not from this very same Cause acting, we will suppose, in a most violent Manner, to wit by a sudden Explosion of the Vapours, and an excessive temporary Rarefaction of the Air, that those Columns of Water, which we call *Spouts*, and those immense Waves, which are termed *Boars*, arise? For it is certain that great Flashes of Lightning always accompany these Phænomena, which make as it were a momentary Vacuum. I several Times have known such a Mountain of Water, as they here call a *Boar*, rise within a Quarter of an Hour, nay in a much less Time, at least 12 Feet perpendicular, and presently sink quite away again; which perhaps is not so easily explained upon any other Hypothesis.

(C) A very moist and cold Temperature of the Air always creates Catarrhs, Coughs, and other Disorders, that depend on a serous Colluvies, and that not only by hindering Perspiration, but also by insinuating the noxious Humidity, fraught with aerial, or nitrous, Salts into the Blood through the very Pores of the Skin: And I am persuaded it is from these Causes, that *Britons* are much more subject to Coughs than the *French*, or *Spaniards*, who live in a drier

drier and warmer Atmosphere.—I doubt indeed whether the Air as Air can enter the Body. — It is certain however it can enter Plants, and even through the Bark of Trees*: Without all Doubt the Humidity of the Air enters the Pores, nor is that a Wonder since it penetrates the hardest Stone and Wood.—Many Experiments indeed confirm this Attraction (or Imbibition) of this aerial Humidity, and what pray now should hinder it more than the Exhalations of Turpentine, or Quicksilver, which enter even into the inmost Recesses of the Body? A strong young Man, exhausted by Labour and Fasting, imbibed through the Pores, in the Space of one Night, eighteen Ounces†. — This, though not in so great a Quantity, is often noted by those, who manage the Riders at Horse-Races, where they are obliged to be fasted down to a certain Weight.

Hence may be deduced three useful Rules in the Art of preserving Health.—1st, That no Person, fasting, or very much fatigued, should enter into a contagious Air, or visit People sick of a malignant, or pestilential Fever: I have known this fatal to many, even Physicians; for then they most readily receive the contagious Effluvia.—2d, Every one should carefully avoid continuing long in a pol-

* *Hales's Vegetable Statics*, cap. 5.

† *Vide Keil Medicin. Static. Britannic.*

luted Air. The Methodists of old, as *Cælius Aurelian* * tells us, even purified the Air of the Chambers of the Sick by proper Medicines: It is certainly of great Importance that a Person, labouring under an ardent Fever, should breathe a free and cool Air, not a thick, hot, and suffocating one; therefore *Celsus* † orders, that the Sick should be kept in a large Room; if that cannot be had, let a moderate Fire be kept in the Chamber, which may carry off the impure and morbid Stench of the Room up through the Chimney, which, otherwise remaining stagnant a long Time, would grow more and more pestilent; but by this Method the Chamber is kept sweet and airy with the greatest Safety.

3dly, Hence moreover you see the Danger of lying in Bed with an unwholesome Bed-fellow: How many have I known grow consumptive from this Cause, that were very healthy before? How careful ought we to be then in admitting any Person to our Bed? How pines the fair Girl in a dry old Man's Arms, whilst he thence recruits his Vigour? Nor could a better Method be thought on of cherishing the old *Jewish* King, *David*, than by providing a beautiful *Shunamite* Virgin to take him into her Bosom.

* Lib. ii. cap. 36.

† Lib. iii. cap. 7.

(D) From an Air not duely elastic, and very moist, a too great Lentor of the Blood is readily produced, whence the Circulation through the smallest Vessels is not free, but in the larger more rapid than it should be, and both increased by taking Cold, which suddenly stops the Perspiration, and brings on a feverish Paroxysm; which yet soon wears off, the Obstructions being removed, the Pores opened and a Sweat following, unless the Blood is too slimy, or viscid, for then either a putrid and slow Fever, or an ardent and vehement one comes on, to wit as a more, or less, elastic State of the Fibres, and Disposition of the Humours, may have inclined.—Wherefore I would advise the younger Physicians not to be too forward in exhibiting the *Peruvian* Bark, Alexipharmacs, and volatile Salts, especially in the very Begining of intermittent Fevers, and not till after due Evacuations, if they are requisite; for I have several Times known Pleurifies, Peripneumonies, or a continual Fever with a Delirium, or comatose Disposition, arise from such Managements: A simple intermittent Fever indeed seldom proves fatal, but, if it is turned into a continual, it becomes very dangerous (*Celsus* Lib. iii, Cap. 15. ad Finem.) On the very first Attacks therefore scarce any Thing more is necessary for the Sick, but to drink plentifully some warm, diluting Liquor, which

which puts off the Cold Fit, and promotes the Vomiting if it be urgent, and at length intirely carries off the feverish Paroxysm by Sweat; to promote which it is very necessary that the Patient should lie in Bed during the Paroxysm.

When the Fever is well off give a Vomit, then a Purge, or at least a Clyster, if there was no Looseness before, in which Case it is proper to restrain it, having premised a Dose of Rhubarb.

The Cleansing of the first Passages from the putrid Colluvies is certainly of great Service in extinguishing all Kinds of Fevers after Bleeding to a proper Quantity, if it is necessary.—Nor is a Vomit only useful by cleansing the Stomach, &c. but its very Action also is apt to remove Obstructions in the inmost Recesses of the Body; it is proper therefore to provoke Vomiting in both Intentions, which even of itself hath cured many an Intermittent.

After the second, or third, Paroxysm you will see what Kind of Fever it is like to be, and thence to adapt your Medicines; amongst which the *Peruvian* Bark hath justly the Pre-eminence: But I know not how it now happened the Bark, how diligently soever we were in chusing it, was far from duely answering our Expectation, unless first of all assisted with Cinnabar, Camphire, Myrrh, and afterwards with Stomachics, Aromatics, and Chaly-

Chalybeates. At that Time indeed I did not know the Use of Mercurius Alcalifatus, which soon after however that excellent and most celebrated Physician, Dr. *George Cheyne*, communicated to me : And this Preparation of Mercury I have a thousand Times since found exceedingly useful in a very great many Disorders.—Mercurials certainly have a very great Efficacy in breaking the Lensor of the Blood, and removing Obstructions ; nay, when prepared without any Stimulus, I have not only found them very highly beneficial in intermittent Fevers, but also in Pleurifies, Peripneumonies, and Rheumatisms, after proper Blood-letting ; for, though they attenuate the roapy Humours, they do not much rarefy, or agitate the Blood, yet however they much increase its Momentum.—The most acute *Jurix* formerly demonstrated * that the Gravity of the red Globules of the Blood was to that of the Serum, as 1126 to 1030, and they seem to be made of so great a Gravity, that they might preserve a due Fluidity of the Serum, and keep the Tubuli Sanguiferi free and open—But where there is a great Tenacity of the Humours, and stubborn Obstructions in the small Vessels, there is a Necessity for such Things as may more considerably increase the Momentum of the Blood,

* Vid. Philosoph. Transact. No. 361.

But

But towards the End of these Intermittents the Stomachic Chalybeates, and astringent Aromatics, were of very great Service, without which an œdematous Tumor of the Feet would succeed, and very often a Relapse even when the Disease had been totally carried off. To prevent these Relapses it was very proper to take the Bark again with some Chalybeate Stomachic, about the 8th, or 10th, Day after, and to continue them for a few Days at least. —May not such Things then be very useful, as Preservatives, taken now and then when a too humid and unelastic Air disposes the Blood to a Lentor, and enervates the Tone of the Fibres, especially for the Infirm, and such as are subject to a weak System of the Nerves? —This Method hath succeeded in my Practice exceedingly well with the Hysteric and Hypochondriacal.—Perhaps this will not be an unuseful Hint to those, who have not the Happiness of a good State of Health, or to those, who have the Care of them.—To the Delicate and Luxurious a roasted *Seville*-Orange squeezed, and infused in a generous red Wine, will prove both an effectual, and a pleasant Antidote.

Certainly nothing is more proper to eradicate intermittent Fevers than frequent Vomiting, especially when a Nausea and frequent Straining to vomit, are urgent, which indeed
in

in such is always common, for whilst the Stomach loaded either with an acid Mucus, or bilious Colluvies, hath almost quite lost its Tone, like an inert Bag, imbued with a putrid Ferment it corrupts every Thing that is put into it, and continually foment the Disease, till it is thoroughly cleansed.—A Decoction of Ipecacoanha, or an Infusion of it in Wine, is one of the safest Vomits we can give : If something stronger is wanted a Spoonful, or two, of the common antimonial Wine may be added—But it is wrong Advice, that some give, to make Use of oily Things to provoke Vomiting, or to drink immense Quantities of warm Water ; for the former daub over the Stomach rather than cleanse it, and the latter too much load it ; nay truly this Deluge of Drink is often so far from promoting Vomiting that, by over distending the Stomach, it quite destroys its Power of Action. Vomiting therefore is vastly more properly promoted by moderate Draughts of a thin Infusion of Chamomile-Flowers, and, at the Close of it, red Wine mulled up with some Spices, adding to it half, double, or triple the Quantity of Water, as may, be indicated ; for this both supports the Strength of the whole Body, and in a particular Manner also that of the Stomach : So that, exerting its constrictive Power more strongly, it squeezes and scours off the

Filth that lies in the Folds and Cavity thereof, and likewise, by corroborating its Fibres and Coats, it is much less liable to be filled again with such a Load of Impurities.—Hence it is that a Vomit on austere red Wine, aromatized somewhat, is so useful in arthritic Cases where the gouty Humour hath fallen on the Stomach.

The *Romans* * of old vomited themselves out of mere Luxury, that they might eat the more heartily; why should not we therefore do it for the Sake of Health? Especially since there is no Danger in the Operation, if managed in the Manner described above, and after a due Emission of Blood, if proper; for, if more is swallowed than can be digested, we should not suffer it to corrupt in the Stomach, or, if it be already corrupted, there is no more ready Way of throwing it off than by that it went in: There is certainly no other Method of clearing the Stomach from its bilious and pituitous Saburra, the Origin, and Fomenter of many Diseases; for whatever is corrupted in the first Digestion is never mended in the second Concoction, and therefore such as the Chyle is, such will be the Blood.

Nor doth a clean and firm Stomach contribute only to the Vigour of the Body, but

* *Celsus*, Lib. i. Cap. 3. .

even it makes the intellectual Faculties the clearer ; and therefore *Carneades* the *Academic*, about to write against the Books of *Zeno* the *Stoic*, * purged his Head and Stomach with *Ellebores* : Very few Philosophers come out of the School of *Apicius* ; there is scarce any Thing certainly that clouds the Head more than a Stomach crammed by Gluttony : Hear *Horace* † not altogether of the Sentiment of *Pythagoras*, as to Diet and Temperance,

———“ *Quin corpus onustum*
 “ *Hesternis vitiis animum quoque præ-*
 “ *gravat una*
 “ *Atque affigit Humo Divinæ particulam*
 “ *Auræ.*”

He who duely considers the long Contours, Inosculation, Ramifications of the intercostal Nerve, and *Par vagum*, or eighth Pair, and the Consent and Sympathy between them ; so that either of them being touched with any acrid Matter, or Poison, immediately causes a Vomiting ; and who also reflects, that, by the Action of Vomiting, every Nerve and Fibre is on the Stretch, and agitated, is the only fit Judge in what Diseases, and on what Conditions, Vomiting is to be excited : In very many Disorders it is undoubtedly very useful,

* *A. Gellius*, Lib. xvii. C. 15.
 Satyr. 2.

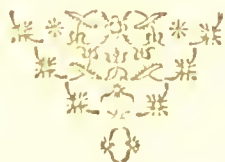
† Sermon. Lib. ii.

seeing it attenuates all the Humours of the Body, and promotes all the Secretions.

(E) I have made very little Alteration in the Method of Cure, only I have now found it proper to add to the Medicines, above described, Elixir of *Vitriol*, and to advise the drinking of *Spa*, or *Pymont* Water daily; and with happy Success I then also recommended cold Bathing, especially to those recovering from stubborn intermittent Fevers, to wit, to restore the Tone of the Fibres and attenuate the roapy Humours. At length indeed I found this would prove a Remedy where scarce any thing else availed, and that sometimes in very obstinate Quartans—However new and unusual this Method may seem, I sufficiently experienced its Efficacy.

(F) When an E S E, or E N E, Wind blows, the Air becomes very elastic, and weighty, and generally more cold also; hence it distends and presses the Lungs more than usual: And moreover the Atmosphere, being rendered more weighty, compresses also the external Habit of the Body, and, if it be pretty cold, it constricts the Nerves and cutaneous Fibres, hence less Blood is thrown on the external Habit of the Body, but a greater Quantity on the internal Parts, and hence a more rapid Motion of the Blood there. No Wonder therefore if such, who have bad Lungs,


Lungs, suffer in such Seasons, as then the Vesicles of the Lungs are too much distended with Air, and its Vessels with Blood.—On this Account it is that a great many fall into asthmatic Paroxysms when the Wind is in the eastern Quarters—To such Blood-letting is useful, nay altogether necessary, when the Difficulty of Breathing is very urgent—Then soft, antiphlogistic Laxatives, Gas Sulphuris, Vinegar, or Oxymel of Squills given out of Vinegar, or Honey, and Water or any subacid, thin Drink carry off the Paroxysm: The bathing the Feet in warm (not hot) Water by deriving the Humours to the lower Parts is beneficial: I knew a fine young Woman, who, a Day or two before her Menstruation, used to be seized with a great Difficulty of Breathing, constantly relieved by this Method—On the contrary in the pituitous, or humid Asthma, Epispastics, Volatiles, stronger Purgatives, and sharper Detergents, are necessary.





O F T H E
C O N S T I T U T I O N
 O F T H E
 A I R, and E P I D E M I C D I S E A S E S,
 I n t h e Y E A R 1729.

J A N U A R Y.


 T the Beginning and End of *January* the Air was very cold, the Winds northerly, the Barometer very high, thick Fogs very often, and sometimes foetid, frequent and very sharp Frosts—But in the Middle of the Month, the Mercury falling, there was Rain and an unsettled Wind, bending however generally from the West to the North—At the End easterly Winds greatly dried the Atmosphere, though it had been before much more moist.

Rain 4. 12. $\frac{1}{13}$ — $\frac{1}{16}$. 19. $\frac{11}{21}$. Snow the
 Dig. Dec.
 7th in the Night, = 0.900.

AB. very great the 6th H. 11. p.m. ENE 1
 —on the 14th H. 9. p.m. I observed a very
 lucid Cloud between *Orion*, the *Bull*, and the
 Mouth of the *Whale*, which darted on all
 Sides very lucid vibrating Rays, though there
 was not the least Sign of a northern Light any
 where else that Night.

Greatest Height of the ☽	9. 30.4. a Calm	} Mean Alt.
Least	14. 29.1. WNW 2.	
Coldest Day	1. 74. ENE 1x.	} Mean Heat 61 $\frac{1}{5}$.
Warmest —	19. 52. WNW 1.	

Coughs, Squinzies, and Tumours of the
 Throat very frequent; Chilblains exceeding
 common even amongst grown Persons: Pleu-
 rifies and rheumatic Fevers up and down—A
 very large Bleeding and much emollient
 Drink greatly relieved the Pleuritic, and the
 same were no less useful to the Rheumatic;
 but warm relaxing Fomentation often applied
 to the severe Pains of the Joints and Limbs
 gave great Relief.

FEBRUARY.

At the Beginning of *February* the Baroscope
 was at 30.2, the Wind at North, after the 7th
 Day the Wind was westerly, bending now to the
 South, now to the North, some Rain: From
 the 14th to the very End continual Gusts of
 Wind, sometimes violent, from the East,

F 4

which

34 *Of the Constitution of the* [1729.
 which made the Atmosphere cold and dry,
 and the Mercury rose very much.

Rain 4. ^{'''}7. [']9. [']10—12. Snow 5. 14. 24
 Dig. Dec.
 = 1.184.

A stormy Wind 23. 24. Lightning 9. H.
 8. p. m. S W b S 3.

(A) I have often noted, this Month, the
 Spirit in *Hawkſbee's* Thermometer at 66, and
 yet at the ſame Time there was not the leaſt
 Froſt any where; this eſpecially from the 17th
 to the 21ſt.

Greatest Height of	8	25.	30.3.	E 3.	} Mean Altit. 29.7 $\frac{2}{3}$.
Least	—	10.	29.1.	W 3.	
Coldest Day	—	6.	72.	N 1.	} Mean Heat 62 $\frac{1}{2}$ $\frac{8}{3}$.
Warmest	—	9.	56.	W b S 3.	

Severe Fits of the Gout and Rheumatism,
 even much more excruciating than common.
 Dry laborious Coughs are frequent—The Blood
 drawn from all Persons almost is very thick,
 and hath very little Serum; where there is any
 Thing of a Fever it is very viscid: However
 Pleurifies and Peripneumonies are less frequent
 than one would have thought: Many as yet
 labour with asthmatic Disorders, and many,
 even Adults, with Chilblains.

M A R C H.

The NNE. Wind blew strong frequently
 till the 14th of the Month, the 15th a stormy
 SE.

S E. Wind with much Rain: The 16th and 17th the N E. Wind raged greatly, towards the End a much milder Wind from the West, and the Mercury sunk. But on the 24th about Noon there was a most violent Storm of Wind from the North—The Air was dry and cold this Month.

Rain $\frac{1}{1}$ 1. 12. 14. $\frac{111}{15}$. 16. 22. $\frac{1}{23}$. 24. $\frac{1}{26}$,
Dig. Dec.

27. 28. 30. 31. Snow 11 = 2.092.

Hard Frost from the 10th to the 13th, the Wind generally N E—Stormy 16. 17. 24.

Greatest Height of ☿	17. 30.2. N N E 3°.	} Mean Altitude
Least ———	15. 29.0. S E 3°.	
Coldest Day 11. 66. N 1.	} Mean Heat 54.	
Warmest — 31. 49. W S W 1.		

Severe Rheumatisms and Gouts, yet I scarce remember more obstinate Torments in them, nor the Gout more anomalous: Most troublesome Coughs with Shortness of Breath and great Oppression afflict very many Persons, oftentimes with a slow Fever; the Expectoration is extremely difficult and viscid—These were relieved, after proper Bleeding, with plentiful warm Diluents, and then Detergents of Oxymel of Squills, Gum Ammoniac. Flowers of Benzoin, &c. and frequent Application of Epispastics—Nothing abated the Violence of the Cough more effectually, or more safely, than *Le Mort's* Elixir Asthmaticum and *Matthews's* Pill.—But here it should

should be noted, and constantly observed, that where Attenuants and Volatiles are liberally given, and Blysters frequently applied, much Dilution is necessary, the Lymph is otherwise dissipated, and the Blood inspissated too much, and made more acrid, whence the Inflammation and Fever are necessarily increased.

A P R I L.

The Air was thin and dry during the Month of *April*, nay there was even a Frost the 13th; the Wind was mostly easterly in the Middle of the Month bending to the North, but towards the Close to the South—The Baroscope was high from the 11th to the 29th—Great Dews, Hoar-Frosts, and clear Sky from the 13th to the 19th often.

Rain 1. 2. 7—10. $\frac{1}{25}$ —27—30 = 1.692. Dig. Dec.

An AB. 11. 10. p. m. N N E 2.—A slight AB. 21. N W 1.

A Storm the 9th at Night S E—25 E S E.

Greatest Heat of	8	16.	30.1.	E N E 1.	} Mean Alt. 29.6 $\frac{14}{100}$.
Least	—	25.	29.1.	E S E 4.	
The coldest Day	13.	57.	E b N 1.	} Mean Heat 46 $\frac{2}{3}$ °.	
— Warmest —	29.	40.	S S W 1.		

Erysipelatose and pustular Fevers frequent. The Small-Pox here and there—A baneful Season for tabid Persons, especially such as in
the

the past Months suffered under the slow pulmonary Fever, and were thence disposed to a Phthisis.

M A Y.

In the Beginning of this Month the Weather was cold and rainy, the Barometer falling; on the 8th, early in the Morning, the Pools were frozen over, but that Day in the Evening Lightnings without Thunder; from thence the Wind and Weather various: From the 16th to the End, now a N N E Wind, sometimes a S E, lifted the Barometer, and made the Atmosphere clear and dry.

Rain $\frac{'''}{3} - \frac{'}{5}$. 6. 10. $\frac{'}{12}$. 14. 19. 20. $\frac{'}{24}$
 Dig. Dec.
 = 1.560.

A slight AB. 6. 10. p. m. N b W 3.

Greatest Height of ☿ 8. 30.0. N W 1. } Mean Alt.
 Least ——— 5. 29.1. W S W 3. } 29.9 $\frac{1}{3}$.
 Coldest Day 8. 54. W N W 1. }
 Warmest 28. 35. E b S 1. } Mean Heat 41 $\frac{2}{3}$.

Peripneumonic and Erysipelatose Fevers; Small-pox, and the Chicken-pox up and down the Country.—Frequent burning Pains and Tumours of the Feet, but they soon wear off.

J U N E.

There was no remarkable Elevation of the Barometer this Month, about the Middle of
June

June it was low, and then no small Quantity of Rain fell. — From the 12th to the 23d the Air was very thick and moist, in the mean Time a south-west Wind, and sometimes a Calm. — At the Beginning and End a S. E. Wind. Great Dews near the End.

Rain 2. $\frac{''}{3}$. 7. 8. $\frac{'}{11}$. $\frac{''}{12}$ — 14. 16. $\frac{''' }{17}$.
Dig. Dec.
22 = 1.662.

Greatest Height of ☉ 26. 29.9. N 1. } Mean Altit. 29.6 $\frac{3}{10}$.
Least ————— 13. 28.7. S 3. }
Coldest Day 4. 40. E 3 $\frac{x}{1}$. }
Warmest — 29. 29. E 1. } Mean Heat 32 $\frac{16}{100}$.

The Erysipelas and Small-pox epidemic. Slow nervous Fevers frequent, so are Intermittents, and especially Remittents. Head Aches, and Madness up and down. Coughs amongst Children.

J U L Y.

At the Beginning of *July* the Weather was sufficiently serene, and a strong easterly Wind blew from the 4th to the 10th very often vehement, the Mercury subsiding, then veering to the South it depressed the Barometer, and the Atmosphere became foggy and very moist: However, a westerly Wind blowing towards the Close, it rose again somewhat. There was very little Sun-shine after the 6th, though it was very sultry.

Rain

Rain $\frac{1}{7}$. 9. 11. 16— $\frac{1}{18}$. 21. 23. $\frac{1}{24}$. $\frac{1}{25}$.

$\frac{1}{27}$. 28. $\frac{1}{31}$ = 1.918.
Dig. Dec.

A Storm with Thunder the 7th at Night, E.
Lightning the 15th at Night.

Greatest Height of ☿	3. 29.8. E b N 1.	} Mean Altit.
Least	25. 29.0. S b E 3x.	
Colest Day	8. 36. E b N 3.	} Mean Heat $28\frac{2}{3}$.
Hottest	— 22. 22. a Calm.	

Many are seized with the Small-pox.—All this Month a slow, putrid Fever, towards the Close remitting, and at length intermitting, hath been very epidemic in this Country: The Head, Stomach, and Loins were chiefly affected, as in the Onset of the Small-pox, with a great Oppression on the Breast, Sighing and great Languor: Perhaps it was such a Kind of a Disorder that * *Sydenham* called Febris variolosa. Children, young People, Women, and the more infirm, were more especially attacked with it. The Blood drawn from them was seldom viscid, the Urine commonly thin and crude with an ash-coloured, mucous, and imperfect Sediment, as if made up of wheaten Bran (which *Hippocrates* calls ὑπόστασις κρημνιόδης) the more perfect the Sediment, the more Hope. The Tongue was not very dry, but daubed over with a glutinous, brown Mucus. Near the End of the Disease a Diarrhœa, and sometimes

Secl. 3. cap. 3.

a bloody

a bloody Dysentery, was greatly urgent, especially when a proper Vomit was not administered in the Beginning—indeed these were fatal to some. But a Kind of red Petechiæ, red miliary, itching Pustules, or large Sweats, breaking forth most commonly quite carried off the Fever.

Bleeding was seldom profitable except in the Beginning of the Disease, but Vomits were very necessary; then frequent Blistering, the Blisters gradually laid on, in the mean Time gentle Cordials, Cinnabar, Paregorics, Sack-Whey, subacid diluting Drink largely taken, were very useful—as soon as ever Signs of Concoction appeared, to wit the Urine subsiding and the Fever remitting, the *Peruvian Bark* was of the greatest Service.—But if, at the State of the Disease, a Coma, or Delirium came on, there was an immediate Necessity for Cupping and drawing off Blood from the Neck and Shoulders, and applying immediately on the Scarificating Blisters, and behind the Ears particularly, or to the Head when well shaved, injecting forthwith a purging Clyster of the mild Kind.

However, notwithstanding gentle Purgatives, particularly of Rhubarb, carried off the Dregs of the Disease at the Close with very great Benefit; yet the drastic and aloetic Kind were productive of very bad Effects; by an impro-

improper Use of which I have seen large Quantities of Blood voided with very terrible Griplings; nay after a Purge, though very gentle, a paregoric Draught was absolutely necessary.

Many were seized with this Fever, yet few died.

A U G U S T.

There was little Rain this Month, at the Beginning indeed, and at the Close some fell, and then from the southern Quarters a very moist and thick Air came in — from the 10th to the 24th a hot clear Season, and a gentle south-east Wind for the most Part. There was but little Rising or Falling of the Mercury in *August*.

Rain 1. 3. 5. $\frac{1}{6}$. 9. 24. $\frac{11}{26}$. 27. $\frac{1}{29}$. 31
 Dig. Dec.
 = 1.002.

Very great and frequent Dews in the Middle of the Month, Thunder at a Distance from the West 20. 23.

Greatest Height of ☿ 16. 29.9. E b N 1. Least ————— 6. 29.2. W N W 2.	}	Mean Altit. 29.6.
Coldest Day 8. 37. N N W 1. Hottest — 23. 18. a Calm.	}	Mean Heat 28 $\frac{3}{5}$.

The epidemic Fever still continues, but about the Middle of *August* the red miliary Pustules were vastly more frequent than in *July*. A very bad Kind of Small-pox now rages.

rages. The Itch infects many Persons, those especially who are recovered from the epidemic Fever.

S E P T E M B E R.

The Vapours, which the great Heat of the Summer had raised, now fell in continual and heavy Rains; the Atmosphere in the mean Time was exceeding thick and humid, very little Sun-shine, the Barometer very low. A south-east Wind almost constantly from the 2d to the 16th, and too often vehement: From that to the End a south-west Wind, frequently stormy.

Rain $\frac{''' }{2.}$ $\frac{' }{4.}$ $\frac{'' }{6.}$ $\frac{''' }{12.}$ 15. $\frac{''' }{16.}$ — $\frac{'' }{19.}$ $\frac{'' }{21.}$
 $\frac{' }{22.}$ $\frac{'' }{23.}$ — $\frac{''' }{30.}$ = 6.498. Dig. Dec.

A Storm the 8th at Night S E b S — 21.
 S S W — 22. W S W. a Whirlwind 10. E b N.
 — an AB. 12. E b S.

Greatest Height of ☾ 3. 29.5. E b N 1. } Mean Altit.
 Least ————— 16. 28.7. S S E 3. } 29.2 $\frac{1}{4}$.
 Coldest Day 23. 42. W S W 2. }
 Warmest — 1. 28. W 1. } Mean Heat 32 $\frac{1}{4}$.

A malignant Kind of Small-pox rage very greatly with purple, and often also black, Spots—at the State of the Disease the Pustules either turn black, or are only full of crude, thin Ichor.—The black Crusts adhere a very long Time, even to those that recover. In the
 con-

confluent Kind the Crifis is attended with the utmoſt Danger, nor doth the Fever terminate often before the 17th Day, many Times not before the 21ſt: Worms are often diſcharged, eſpecially towards the End. The epidemic Fever (B) ſtill continues, but leſs frequent.

OCTOBER.

At the Begining Rain, then fair Weather, the Mercury riſing, but it ſuddenly fell; from the 15th to the 24th perpetual Rain, the Wind ever and anon ſtormy from the ſouthern Quar- ters, yet from the 24th to the very End it ſtood between the N E and S E, little Rain falling.

Rain $\frac{''''}{1} - \frac{''''}{5}$. 6. 9. $\frac{'}{11}$. 12. 15. $\frac{'}{16} - \frac{''}{19}$.
Dig. Dec.
 $\frac{''}{20}$. $\frac{''''}{22}$. $\frac{'}{23} - 26$. 31 = 3.985.

A Storm the 11th at Night — great Storm with Thunder and Lightning the 19th at Night S S W, and the next Morning E S E. Hail 12. 20. 21. an AB. 14. N W 1.

Greatest Height of ☉ 8. 30.0. a Calm.	} Mean Altit.
Least ————— 19. 29.0. S S W 4.	
Coldest Day 14. 55. N W b W 1.	} Mean Heat 43 $\frac{1}{2}$ $\frac{8}{7}$.
a Hoar-Frost in the Morning.	
Warmest Day 9. 34. S W 3.	

The epidemic Small-pox ſtill rage not only here, but every-where almoſt, and are a very malignant, black Sort, the ſwarthy Cruſts ad-

G here

here a long Time and greatly deform the Face. —The secondary Fever is more vehement than usual, and continues longer, not seldom to the 20th Day and more, and is fatal to very many. —To take off this Fever nothing was more happily and successfully used than repeated Cathartics, with a little Calomel now and then, interposing however frequently a Purgative. I not only experienced the Benefit of this Method in my own dearest Children, but in a very great many others.

Whoever would see what hath been further said on the Expediency of this Method may read what that every Way learned Dr. *John Friend*, and the illustrious Dr. *Mead*, and other very learned Physicians have wrote on this Head—and likewise, if they please, what I also have said upon it. *Philos. Transact.* No. 390.

I scarce knew a Symptom more fatal in those Small-pox than a cold, shivering Fit happening at the State of the Disease, a Symptom indeed in the Small-pox, at that Time of it, always to be dreaded.

The slow nervous Fever is now almost vanished.

N O V E M B E R.

This whole Month was very stormy and exceeding rainy, south and south-westerly Winds oftentimes blew furiously, hence the Mercury in

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in the Baroscope sunk very much ; very great Floods every-where.

Rain $\frac{1}{1}$. $\frac{2}{2}$ — $\frac{4}{4}$. 6. $\frac{7}{7}$. $\frac{8}{8}$. $\frac{9}{9}$. $\frac{11}{11}$ — $\frac{13}{13}$ — $\frac{16}{16}$.
 $\frac{18}{18}$. $\frac{19}{19}$. $\frac{20}{20}$. $\frac{23}{23}$. $\frac{24}{24}$. $\frac{25}{25}$. $\frac{26}{26}$. $\frac{27}{27}$. $\frac{30}{30}$ = 6.333. Dig. Dec.

Storms the 2d S S W—the 6th at Night S W—the 18th and 19th at Night S W—the 24th at Night S b W—the 27th in the Morning W N W.. A great AB. the 5th H. 10. p. m. W N W 1.

Greatest Height of ☿	22. 30.0. W N W 1.	} Mean Altit.
Least	25. 28.7. S W 3.	
The coldest Day	21. 56. N W 1.	} Mean Heat 47 $\frac{2}{3}$.
— hottest —	3. 40. S S W 3.	

The Small-pox still epidemic — a slight catarrhal Fever with a troublesome Cough, some Shortness of Breath, Loss of Appetite, Faintness and rheumatic Pains run up and down ; when it is more severe than common it becomes a bastard Pleurisy, or Peripneumony : But it was easily discussed by Bleeding, and a gentle Vomit, with the Application of a Blister or two, and giving withal diluting, soft Sudorifics, gentle Anodynes, especially Sp. Volat. Oleos. — C. C. Elix. Asthmat. out of thin, warm Wine Whey.

DECEMBER.

A very stormy, rainy Season continued till the 10th of *December*, the S S W. perpetually

G 2

ally blustering: From thence a strong easterly Wind elevated the Mercury pretty much, and consequently fair Weather sometimes. From the 19th it veered again to the South, and much Rain fell. Fair at the End of the Month—The Air all this Month was vastly thick and humid, and warmer then ordinary, as warm nearly as in *November*.

Rain $\frac{''}{1}$. $\frac{''}{3}$ $\frac{''}{5}$. $\frac{'''}{7}$. $\frac{''}{9}$. 11. $\frac{'}{13}$. 18— $\frac{''}{20}$. 21.

$\frac{''}{23}$. $\frac{''}{24}$. 25. 28 = 4.180. Dig. Dec.

Vehement Hail 3. a. m. Snow 16. ENE 1. Frost 15. 16. A Storm 3. at Night S W—the 5th S S W. A very high Tide 8. S S W 3.

Greatest Height of ☿	16. 30.2. ENE 1.	} Mean Altitude
Least	1. 29.0. S W 3.	
Coldest Day	16. 63.	} Mean Heat $51\frac{17}{30}$.
Hottest	— 8. 44. S 2.	

Coughs, the catarrhal Fever, and Small-pox still epidemic; Madness more frequent than common.

The whole Quantity of Rain 1729 = Dig. Dec. 33.055.

Some short Notes.

(A) I have several Times observed, especially in the Spring Season, that actual Ice hath happened tho' *Hauksbee's* Thermometer was then only at 55, whereas, in the Midst of the Winter, none at all when it hath been at 65, and much below it. This particularly was observable last *February*, between the 17th and 21st; for then there was scarce the least Frost (or Ice) tho' the Atmosphere was very cold, and a strong easterly Wind sunk the Thermometer to 67—The very famous *Cyrilli* (Philosoph. Transact. No. 424 and 430) hath noted, that at *Rome*, when *Hauksbee's* Thermometer was only at 55, they had commonly Frost—The * Degree of Cold therefore, by which Ice is produced, doth not seem to be fixed, and certain, which is a pretty strong Argument that Freezing is not produced by the mere Absence of Heat and Motion †.

(B) Did not the warm and moist Temper of the Air in the preceding Summer, by greatly relaxing the Fibres, dispose the Blood and Lymph to too great a Lensor? The Oils and Salts of the Body to too great an Acrimony?—And this especially when the Pressure of the Atmosphere was for the most Part less than usual: May we not from hence rea-

* See the Preface, p. 21. † Ditto, p. 22.

dily account for the untoward Fever mentioned, and the malignant Small-pox?

In such Constitutions of the Air contagious Diseases are undoubtedly greatly propagated, for then all Places of Nastiness and Putridity smell vastly worse than in a dry, cold Air, nor doth the Flesh of Animals, Beef and Mutton for Instance, taint near so soon in such an Air, as by it the corrupt and stinking Effluvia are carried up higher into the Air, and dissipated. But when a putrid Mephitic hangs over, and as it were envelopes the Surface of the Earth, the putrid Effluvia are drawn into the Body in much greater Quantity, not only by the Breath, but also by all the Pores of the Body—Besides, in such Seasons, the Atmosphere hath not a sufficient Pressure, nor the Fibres a sufficient Force, by their conjoint Action to propel the Humours in a proper Manner, or expel the contagious Miasmata: So that the more copiously they are received the worse Effects they produce—On the Contrary a cold, or stormy Season either restrains the Effects of the Contagion, or dissipates the malignant Air.

Moreover, when a warm and moist Constitution of the Air continues for a considerable Time, the Humours of the Body contract too great a Lentor and Acrimony, whence they are more susceptible of the ill Impressions of Contagion


tagion—The present Disposition of the Humours certainly is of great Importance either as to the receiving, or repelling any Poison: For Instance a Viper, or a Mad-dog, bites this Person, and another also, yet one is scarce affected by it, tho' the other dies from the Accident. Hence the Winter-Cold puts a Stop to contagious Fevers, not only by making the Air more pure, but also by corroborating the Fibres, and preserving the due Crasis of the Blood; by all which it opposes the pestilential Quality. Hence any Medicine, that is capable of producing such Effects, will prove a very proper Preservative; such is the *Peruvian* Bark with Alexipharmacs and Stomachics; I commonly use a Tincture of the Bark with *Seville-Orange-Rind* and Snake-Root in Wine, or Brandy.





OF THE
CONSTITUTION
 OF THE
 AIR, and EPIDEMIC DISEASES,
 In the YEAR 1730.

JANUARY.

 N the Begining of this Year the Barometer was remarkably high, and the Weather fair, and dry; and, as the north-east Wind blew constantly, it was cold. The Atmosphere at this Time was thin, and dry: However sometimes an icy Mist incrufted every Thing with Frost, especially upon the 12th. Towards the End of this Month the Wind getting to the West, the Mercury sunk: But at the End it rose again, and then there was clear, frosty Weather.

Rain 14. 17. 20—24. 27. $\frac{28}{1}$. 29. Snow
 Dig. Dec.
 the 4th. = 0.666.

Greatest

Greatest Height of ☿	10. 30.6. E N E 1.	} Mean Alt.
Least	28. 29.4. S W 3.	
Coldest Day	12. 70. a Calm.	} Mean Altitude Therm. 59.
Warmest —	28. 52. S W 3.	

The Small-pox, although not so fatal, still prevailed. A catarrhal Fever attacked many Persons.—Terrible asthmatic Paroxysms were also very common.

F E B R U A R Y.

The Wind during this Month being westerly, or southerly, there was often Rain, which sunk the Barometer: But towards the Close of the Month a N N E. Wind surprisingly varied the Weather, causing now Frost, then Hail, then Snow and every now and then Sunshine, and a thin dry Atmosphere; yet the Barometer still fell.

Rain 2 — $\frac{''''}{4}$ — 6. $\frac{''}{8}$. $\frac{'}{11}$. $\frac{'}{13}$. 15. 16. 18.
 20. Snow the 8th—continual Snow the 27th.
 Dig. Dec.
 Hail 14. 24 = 2.315.

A very great *AB.* the 23d at 9 at Night,
 Wind N b E 1.

Greatest Height of ☿	1. 30.1. E b N 1.	} Mean Altitude
Least	27. 28.8. E N E 2.	
Coldest Day	1. 66. E b N 1.	} Mean Alt. Therm. 52 $\frac{1}{2}$ $\frac{5}{8}$.
Warmest —	20. 48. W 1.	

The Small-pox are as yet epidemical, but of a distinct Sort, and seldom fatal. Pleurifies
 and

and Peripneumonies in some Places. Violent Colics were rife towards the End of the Month, owing probably to the same Cause, (A) as was the Pleurisy; for in both of them Bleeding was exceedingly beneficial, and the Blood drawn from those Persons in the Colic as fizy as from those, who had a Rheumatism or Pleurisy. Mild and cooling Purgatives were only serviceable, whilst all the warmer and more drastic Medicines were very pernicious. Nay sometimes they occasioned most violent Pains, and a Suppression of Urine. At this Time I found Clysters and warm Fomentations of vast Use.

M A R C H.

From the 4th to the 8th of this Month the Wind was southerly and stormy, and, a good Deal of Rain falling, the Barometer was very low: From this Time to the 15th the Wind being generally westerly, there was no Rain, unless upon the 10th; the Mercury falling again, it rained till the 21st. At the End of the Month the Mercury rose again, although the Wind was every Day variable.

Rain $\frac{''}{3}$. $\frac{''}{4}$. $\frac{'}{5}$. $\frac{'}{6}$. $\frac{'''}{7}$. 10. 15. $\frac{''}{17}$. $\frac{''}{18}$. $\frac{''}{19}$.
 $\frac{''}{21}$. $\frac{'}{25}$. 26. 28. 29. Hail on the 5th 23
 Dig. Deg.
 =3.442. A small AB. the 9th at 11 at Night,
 a Calm.

a Calm. Heavy Rain with a Storm the 6th late at Night S S W.

Greatest Height of ☿	31. 29.9. N 1.	} Mean Altitude
Least	7. 28.5. S b W 3 ^x .	
Coldest Day	1. 63. N N W 1.	
Warmest	— 13. 42. a Calm.	
		} Mean Alt. Therm. 49 $\frac{2}{3}$ $\frac{1}{4}$.

The Small-pox are yet epidemical, but chiefly in the Country. Colic Disorders are violent up and down; as are also Peripneumonies attended with nervous Symptoms, more especially towards the Close of the Month.

A P R I L.

From the Beginning of *April* to the 18th the Appearance both of the Sky, and Weather varied; as did also the Barometer in its Height a little now and then: But, upon the Blowing of an East Wind, the Vapours were dispersed, and the Rain ceased; the Atmosphere itself also became very dry, and thin. There were frequent Calms this Month, and then great Dews in the Nights.

	$\frac{1}{3}$.	$\frac{1}{7}$.	$\frac{1}{9}$.	$\frac{1}{11}$.	$\frac{1}{13}$.	$\frac{1}{16}$ —18 = 1.258.	Dig. Dec.
Rain							

A thin Ice in the Morning of the 20th E b N 1.
a small AB. 1. a Calm—3. W N W 1.

Greatest Height of ☿	20. 30.1. E b N 1.	} Mean Altitude
Least	17. 29.3. W S W 2.	
Coldest Day	4. 52. N W b W 2.	
Warmest	— 28. 37. a Calm.	
		} Mean Alt. Therm. 43 $\frac{6}{10}$.

The

The Colic and Small-pox still prevail here, and nervous, remitting and intermitting Fevers attended with a slight Delirium are frequent. Erysipelatous Swellings on the Head in the Middle of this Month; and, at the End of it, Coughs, Pleurifies, and Peripneumonies, both of the true and bastard Kind.

M A Y.

The Wind blew very strong from the East or North until the 8th Day, with a very dry Atmosphere; afterwards the Air stagnating, Rain fell. From the 11th to the 20th the Weather was very variable, and rainy, the Barometer falling, and the Atmosphere becoming very moist. From this Time, notwithstanding that there was very little Rain, the Weather was far from being fine, and clear.

Rain $\frac{1}{8}$. 11. $\frac{1}{13}$. $\frac{1}{14}$. 15. $\frac{1}{17}$. $\frac{1}{18}$. 19. $\frac{1}{23}$.

Dig. Dec.

25. 28 = 1.604.

Greatest Height of ☉	1. 29.8. E b N 3.	} Mean Altitude
Least	19. 29.0. S 2.	
Coldest Day	3. 46. N b E 2.	} Mean Alt. Therm. 37 $\frac{2}{3}$.
Warmest	31. 30. N W 1.	

Intermitting and remitting Fevers with profuse Sweats now raged greatly, in the Paroxysms of which there very frequently came on either a Delirium, or Diarrhœa. The smallest Accident changed those Fevers into the

con-

continued, malignant, nervous Kind. Rheumatic, pleuritic, and also peripneumonic Fevers were rife this Month: But the Patients freely and largely (B) expectorated a yellow reddish Matter, which very soon proved critical, so that unless in the very Beginning of the Disease there was no Occasion for Bleeding, at least for a Repetition of it.

J U N E.

The prevailing Wind during this Month was the westerly, inclining sometimes to the South, and sometimes to the North. At the Middle and End of *June* the Atmosphere was very moist. The Barometer never stood remarkably high for the whole Month.

Rain 6—9. $\frac{11}{10}$. $\frac{1}{11}$. $\frac{1}{12}$. $\frac{11}{15}$. 17. 18. 24.

Dig. Dec.

26—28 = 1.715.

Greatest Height of ☿	1. 29.8. NW 1.	} Mean Altitude
Least	15. 29.1. SW 1.	
Coldest Day	10. 41. WNW 1.	} Mean Alt. Therm. $33\frac{8}{35}$.
Warmest —	28. 28. a Calm.	

All the intermittent Fevers almost quite disappeared in this Month, and there were scarcely any other Complaints, unless of a Faintness and Loss of Strength, which was common to every Body.

J U L Y.

J U L Y.

A gentle westerly Wind inclining somewhat rather to the South blew constantly this Month, frequent Calms intervening. The Weather was the very same nearly as that in the foregoing Month, unless that the Atmosphere was more moist, warm and foggy, especially at the Conclusion of the Month.

Rain $\frac{1}{1}$. $\frac{1}{7}$. $\frac{1}{8}$. 10. 16. 25— $\frac{1}{28}$. $\frac{1}{29}$. 31
 Dig. Dec.
 = 2.050.

Thunder at a Distance the 1st, Lightning, and Thunder with a violent Rain the 7th W 1.

Greatest Height of $\frac{1}{2}$ 15. 29.9. a Calm. } Mean Altit. 29.6 $\frac{2}{3}$ 1.
 Least ——— 29. 29.3. W S W 2. }
 Coldest Day 2. 40. N N W 3. } Mean Altit. Therm. 31 $\frac{1}{3}$ 7.
 Warmest — 22. 27. a Calm. }

The Small-pox and those of a very bad Sort were almost all over *Cornwall*. Every-where there were great Complaints of Faintness, and several Hysteric Hypochondriac Paroxysms—At the Conclusion of the Month, the Jaundice was very common—Several slow Fevers, and some miliary—A great Sickness among the horned Cattle also now spreads greatly.

A U G U S T.

The Wind was variable from the Beginning of this Month to the 18th, and for the most part westerly. Thence a N N E. Wind setting in, there followed dry clear Weather:
 From

From thence to the very End of *August*, the Wind was North-east, or South-east. The Atmosphere during this Month was often moist, and misty: Nevertheless from the 17th to the 23d it was sufficiently dry.

Rain $\frac{1}{1}$. 6. 9. $\frac{11}{14}$. 15. 23. $\frac{11}{26}$. 27. 29.

$\frac{11}{30}$ Dig. Dec.

$30 = 1.538$.

A great *AB*. 28. E 2. Thunder and Lightning at a Distance the 26th.

Greatest Height of ☿ 18. 30.0. N 1. } Mean Alt. 29.6.
Least — 26. 29.2. S S E 2.

Coldest Day 24. 39. E N E 1. } Mean Alt. Therm. $29\frac{2}{3}$.
Warmest — 12. 22. a Calm.

The Jaundice accompanied with a slight Fever, and sometimes with a great Hæmorrhage was very common, as were likewise the Small-pox in the neighbouring Parts of *Cornwall*. Otherwise very few Disorders.

S E P T E M B E R.

Much Rain fell between the 4th and 15th Day of this Month, the Wind shifting every Day. Afterwards the Wind was almost always easterly: But there was little Rain, altho' the Sky was generally very cloudy, and the Atmosphere often very moist. There were very great Dews from the 17th to the 24th.

Rain 4. $\frac{11}{5}$ —10. $\frac{11}{11}$. $\frac{1}{12}$ —15. 26 = 2.068. Dig. Dec.

A small *AB*. 24. E b S 1—27. N N W 1.
—A brighter the 26th, a Calm.

Greatest

Greatest Height of ☉	18. 30.0. E 1.	} Mean Alt. 29. 5 $\frac{2}{3}$.
Least	— 11. 28.8. S W 3.	
Coldest Day	18. 40. an Hoar-Frost.	} Mean Alt. Therm.
Warmest	— 6. 29. S. 2.	
		34 $\frac{1}{2}$.

Numbers were seized, with the Apoplexy, and Palsy—Several Women had erysipelatous Swellings in the Legs. Coughs and Defluxions rife at the End of this Month.

OCTOBER.

A very strong easterly Wind blew till the 8th of this Month, the 4th and 5th it was very vehement, so that it stripped off the Leaves of the Trees, and they appeared as if burnt with Lightning; nay it blew down several—Afterwards a much milder Wind from the West, or the South, succeeded, and continued to the End, much Rain in the mean Time falling—The Storm rose so many Vapours in the Beginning of the Month, that they made the Atmosphere exceeding humid—I tasted the Branches of Trees made salt with them at the Distance of three Miles and upwards from the Sea; so greatly was the Sea thereby disturbed.

Rain 6. $\frac{1}{7}$. $\frac{1}{8}$ —10. $\frac{1}{12}$. $\frac{1}{14}$. $\frac{1}{17}$. $\frac{1}{18}$ —23
 —25. $\frac{1}{28}$ —30 = 3.372. Dig. Dec.

A Storm 3 E 4^x—4 E 4^x—5 E b N 4^x.

Greatest

Greatest Height of ☿ 16. 29.8. W 1. } Mean Alt. 29.4 $\frac{8}{10}$.
 Least ————— 5. 29.1. }
 Coldest Day 6. 53. E 3. } Mean Alt. 41 $\frac{5}{10}$.
 Hottest — 15. 38. a Calm. }

Many Coughs and rheumatic Affections all this Month, but without a Fever: Colical Disorders, commonly with a Diarrhœa, afflict great Numbers, but they are much more severe when without a Looseness. An Asthma and a bastard Pleurisy up and down.

N O V E M B E R.

A dreadful Tempest at the Beginning of the Month, on the first vehement Thunder and Lightning with very heavy Rain, and a very furious south-west Wind; from the 8th a more chearful Face of the Heavens, the Barometer rising, the Wind from the West; on the 16th however a Stormy south-west Wind with much Rain—The Atmosphere in the mean Time was vastly moist—From the 26th a perpetual northerly Wind, which rose the Mercury very high, made the Air dry, and produced Frost.

Rain $\frac{''''}{1}$ — $\frac{''}{3}$ — $\frac{''}{5}$. 6. $\frac{''}{8}$. 10. 11. 15. $\frac{''''}{17}$. $\frac{'}{18}$.
 $\frac{''}{19}$. 20. $\frac{''}{21}$. $\frac{'}{22}$. 23. 27 = 4.480. Dig. Dec.

A Storm 1 S W 4^x—2 S W 4^x—3 S W b S 4_x—17 S W 4. Much Snow 25 p. m.

Greatest Height of ☿ 30. 30.4. N 1. } Mean Alt.
 Least ————— 3. 28.9. S W b S 4_x. } 29.7 $\frac{3}{10}$.
 Coldest Day 30. 65. N 1. } Mean Alt. 48 $\frac{1}{10}$.
 Warmest — 22. 41. W 1. }

H

Many

Many colical Disorders with rheumatic Pains : Colds in the Head, Rheums and Catarrhs affect many Persons, a putrid continual Fever is pretty common.

D E C E M B E R.

The Mercury stood at a great Height this Month, a north-north-east, or easterly Wind blowing continually. In the Beginning of *December* a hard Frost with a serene Sky, then, and many Times afterwards : From the 21st to the End, it was very moist, Rain often falling.

Rain 8. 10—12. $\frac{1}{16}$. 23. $\frac{1}{25}$. $\frac{1}{26}$ —28. 31
 Dig. Dec.
 = 1.190.

Greatest Height of ☿ 3. 30.5. N b E 2.	}	Mean Alt. $30\frac{1}{2}$.
Least ————— 23. 29.5. S S E 2.		
Coldest Day 2. 68. N N E 1.	}	Mean Alt. $58\frac{1}{4}$.
Warmest —27. 50. a Calm.		

The Colic hath been hitherto very frequent, and so have Rheumatisms also with a much greater Degree of Inflammation than before. Troublesome dry, laborious Coughs with Tumours of the Fauces—Peripneumonies up and down, but chiefly towards the End of the Month—Slow nervous Fevers in the Neighbourhood, but few in the Town.

The whole Quantity of Rain, that fell this
 Dig. Dec.
 Year, was = 25.698.

A few

A few Notes.

(A) Nothing certainly more mischievous ever crept into Medicine than imposing on Diseases general Names, and attempting to cure them by a Kind of general Medicines—For Instance, all Kinds of Pain in the Belly are called by the general Name Colic—Let it be so ; the next Step taken by Quacks and Medicasters is either to give their grand Arcanum, or turn to the Index of some Pharmacopœia to see what may be found there against the Colic ; the Work is done, and forthwith Elixir Salutis Tinct. Sacr. Pil. Coch.—ex Duob. or something of that Kind is exhibited, whether the Intestines are really inflamed, or only bound up by a Spasm ; whence they often become Poisons instead of Medicines—But it is the Duty of a prudent Physician to examine well into the Nature of the Cause, and then endeavour to remove it—Thus for Example, when a violent Pain of the Abdomen rages, fixed and throbbing as it were with a sharp Heat and a quick, tense Pulse, strong Cathartics are not presently to be given, for the more you attempt to force by such drastic Purges, the more violently the Disease rages, till at length a cruel Iliac Passion comes on, and a Gangrene of the Intestines—First of all therefore, in such a Case, Blood should be drawn

H 2

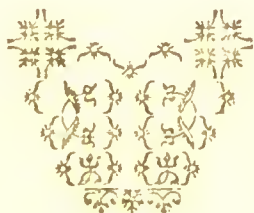
off,

off, and then a very easy Purgative will operate, whereas before a very strong one would be ineffectual—However when a tough acid Pituita is predominant, and creates colical Disorders, quite other Methods should be taken.

(B) In pulmonic Disorders, where the Expectoration is easy and free, Blood-letting is so far from doing good that it often altogether stops that Evacuation, Bleeding therefore is not indicated, nor can it be of Use unless there is an evident Fulness of Blood, or a violent Pain, or great Difficulty of Breathing, or a Quantity of fresh Blood is spit off—Hear the great *Hippocrates*: Πτύελον χρὴ ἐπὶ πᾶσι τοῖσιν Ἀλγίμασι τοῖσι περὶ τὸν Πλεύμονα καὶ τὰς Πλευρὰς ταχέως τε ἀναπύεσθαι καὶ εὐπετέως. Hippocrat. Prognostic. & paulo infra; see also Coac. Prænotion. 13 Sect. de Pleuritide & Peripneumonia in *Duretus*'s Edition of the Coac. Prænot. Consider well also what *Ballonius*, on the Epidemics, hath excellently said concerning this Matter; but, if you have not his Works, with Care read what *Baglivi* hath diligently collected from *Duretus* and *Ballonius* on this Head, in the Appendix to his Chapter on the Pleurisy—Indeed I earnestly exhort the young Physician not to undertake the Management of Diseases of the Breast till he hath very carefully read these Authors.


(C) A Storm really excites more Vapours than even the most fervent Sun, especially if the Wind comes from the Sea: Hence after very great Storms the Atmosphere is commonly rendered very foggy, and great Rains follow, the Vapours being now condensed, which the Vehemence of the Tempest had scattered abroad.

The exceeding small Particles of Water, scattered through the Atmosphere in the Form of Vapour, seem to fly from, and repel one another, but when condensed by Cold, or driven together by contrary Winds, or forced against obstructing Mountains, rush together and forthwith fall in Form of Rain.





O F T H E
 C O N S T I T U T I O N
 O F T H E
 A I R, and E P I D E M I C D I S E A S E S,
 I n t h e Y E A R 1731.
 J A N U A R Y.


 N exceeding cold Season came in with this Year, every Thing was bound up in Frost, or covered with Snow, but a continued and beautiful Serenity made the Severity of the Season very supportable: Through this whole Month the Wind was northerly, and an extreemly hard Frost continued to the very End of it; the Air in the mean Time was very pure and dry. Towards the End of the Month the Barometer fell greatly, which I was surprized at (A), as the Wind still continued in the same Quarter: But this perhaps happened from a considerable Fall of Snow in some other Places.

Snow

Snow 2. $\frac{1}{3}$. $\frac{1}{4}$. 5. $\frac{11}{24}$. 26. A Kind of
 small Snow-Hail 30. 31. Showers of Rain
 Dig. Dec.

11. 12 = 0.622.

Probably scarce half the Quantity of Snow
 was collected, for as it fell into the Recipient
 it froze, soon filled it, and what fell after was
 blown away.

Greatest Height of ☽ 42. 30.3. N E 1.	} Mean Altitude
Least ————— 28. 29.1. N 1.	
Coldest Day 31. 75. N 2.	} Mean Altitude 66 $\frac{9}{12}$.
Warmest — 21. 58. a Calm.	

The Colic still rages, frequently attended
 with severe rheumatic Pains: Dry laborious
 Coughs, and great asthmatic Oppressions, are
 frequent, very often with anginose Swellings
 of the Throat: In those Cases warm Hydro-
 mel, very thin Wine Whey, with Elix. Asth-
 mat. or Pil. *Mathei* were very useful, inter-
 posing now and then Oxymel Scilliticum, and
 applying Blisters to the Neck and Shoulders.
 Very many were very grievously afflicted with
 the Gout.—The Small-pox are up and down
 in *Cornwall*.

F E B R U A R Y.

In the Begining of *February* the Baroscope
 rose, but the Cold remitted; the 8th and the
 9th a Storm from the South sunk the Quick-

silver very much; from the 18th to the very End, Winds from the North scattered the Clouds, and the Mercury rose again.

Rain 3. $\frac{''}{4}$. $\frac{''}{10}$. $\frac{''}{11}$. 13. $\frac{'}{14}$. $\frac{'}{15}$. 16. 18.

Dig. Dec.

Snow 20, much Hail 1 = 1.706.

A northern Light the 19th H. 10. p. m.
N b E 1.

Greatest Height of ☿	2. 30.3. ENE 1.	} Mean Altitude
Least	9. 28.9. SSE 4.	
Coldest Day	1. 73. NNW 1.	} Mean Altitude 57 $\frac{1}{2}$.
Warmest —	10. 53. W 1.	

Asthmatic Coughs still frequent; not a few Pleurifies and Peripneumonies: The Strangles rages greatly amongst Horses.

M A R C H.

The Baroscope kept at a high Station all this Month, the Wind almost continually northerly, a Calm very frequently intervening; the Air was pure and very dry, especially at the End of the Month: Very little Rain, but for the most Part a beautiful Serenity.

Dig. Dec.

Rain 4. 12. 18. 27 = 0.140.

Greatest Height of ☿	2. 30.4. a Calm.	} Mean Altitude
Least	12. 29.7. a Calm.	
Coldest Day	1. 62. NbW 1.	} Mean Altitude 50 $\frac{2}{3}$.
Warmest —	14. 45. NNW 2.	

The Cough and Strangles yet very frequent amongst Horses. Severe Fits of the Gout, and
most

most painful Rheumatisms. Pleurifies, Peripneumonies, Pleuro-peripneumonies, dry asthmatic, laborious Coughs, are exceeding frequent every-where, the Sick spit very little, but breathe exceedingly heavy; many die of those Disorders.

A P R I L.

A north-east Wind continued to blow from the Beginning to the 12th of *April*, and that sometimes very strong, the Weather in the mean Time was very serene, and [for the Season of the Year very cold and dry: From the 13th to the 20th south-west, or West Winds, the Baroscope and Rain falling: The Wind then changed to the East, and on the 22d and 23d was very stormy, afterwards it veered more to the South, and the Atmosphere grew moist.

Rain 13. $\frac{''' }{15}$. $\frac{' }{16}$. $\frac{' }{18}$. 19. 23. 24. 26.

Dig. Dec.

28 = 1.254.

Frost 7. 10. 11. Thunder 18. a very great
AB. 26. 10. p. m. N W 1.

Greatest Height of ☽	7. 29.9. ENE 3.	} Mean Altitude
Least	16. 28.8. SSW 3.	
Coldest Day 10. 62.	NEbN 2. a hard Frost.	} Mean Altit.
Warmest — 28. 43.	ESE 2.	
		29.5.
		48 $\frac{2}{5}$.

The Disease amongst the Horses is now at an End. Small-Pox up and down: (B) Pleurifies and Peripneumonies rage very much;
from

from the Tenacity of the Humours and difficult Expectoration the Disease becomes very dangerous, but, when the Expectoration is free and easy, the Disorder soon breaks, especially if the Matter expectorated is slightly tinged with Blood, which renders it of a Kind of reddish yellow Colour. — I by no Means approve of such Expectoration as is either quite frothy, or very thin and watery.

M A Y.

This Month an easterly, or south-easterly Wind for the most Part, sometimes a south-west, more often north-west; at the End a strong northerly Wind: From the 19th to the very End the Air was exceeding dry.

Rain 4. 5. 6. 8. 10. 16. 17. 22. 24 = 0.634. $\frac{1}{2}$ Dig. Dec.

Thunder and Lightning 22. 24. a Calm.

Greatest Height of ☽	30. 30.1. NNE 3.	} Mean Alt. 29.7.
Least	6. 29.3. SE 1.	
Coldest Day	1. 48. SE 1°.	} Mean Altitude 36 $\frac{3}{11}$.
Warmest	23. 28. NW 1.	

Diseases of the Breast still prevail. — The Small-Pox are scattered up and down, Erysipelas also. The Sciatica more frequent than usual. — The Season however is for the most Part healthy.

J U N E.

In the Advance of *June* the Atmosphere was very dry, the Wind easterly, or northerly, a Calm

Calm sometimes intervening; however the Baroscope sunk gradually, and the Air grew more and more humid. From the 20th the south-west Wind prevailed, which made the Atmosphere, as usual, very moist, foggy and more cold.

Rain 10. 16 — $\frac{''}{19}$. $\frac{'''}{20}$. $\frac{'}{23}$. $\frac{''}{24}$. 25. 26.

Dig. Dec.

28 = 2.148.

Greatest Height of ☉	1. 30.0. E 2.	} Mean Altitude
Least	20. 29.1. W S W 1.	
Coldest Day	7. 38. N 1.	} Mean Altitude 32 $\frac{5}{6}$.
Hottest	20. 29.	

The Small-pox are now epidemic, and often of a bad Kind; towards the Crisis they are either full of a crude Matter, or turn black.—The Erysipelas still common. In other Respects the Month was healthy enough.

J U L Y.

There was no remarkable Ascent, or Descent, of the Barometer in *July*.—The Wind was inconstant, Calms very often, during which great Dews fell: The Air for the most Part was dry, and sometimes very hot, especially towards the End of the Month.

Rain $\frac{''}{7}$. 8. $\frac{'}{15}$. 16. $\frac{''}{20}$ —23. $\frac{''}{25}$. 31 = 1.300. Dig. Dec.

Thunder and Lightning 31. p. m. S S E 1 $\frac{1}{2}$.

Greatest

Greatest Height of ☿	10. 29.8. a Calm.	} Mean Altitude
Least	31. 29.3. SSE 1.	
Coldest Day	19. 37. ENE 1.	} Mean Altitude 27.
Hottest	— 30. 21. a Calm.	

The Small-pox are still frequent : Intermittent Fevers, especially Tertians towards the End of the Month, but in the Country chiefly,

A U G U S T.

A Wind from the East blew almost throughout the whole Month, at the Beginning it was somewhat northerly; the Barometer however did not rise much — towards the End a south-east Wind brought in much Vapour and Rain.

Rain 1—3. 9. 10. $\frac{111}{1}$ 21. 22. 23. 25. 26. $\frac{111}{1}$ 27. 28. 31 = 1.988.
Dig. Dec.

A small AB. 16. N b E 1, Thunder and Lightning 9—21. ESE 2.

Greatest Height of ☿	12. 29.9. NE 1.	} Mean Altitude
Least	26. 29.0. ESE 2.	
Coldest Day	12. 38.	} Mean Altitude 29.
Hottest	— 8. 22. N 1,	

A very bad Kind of Small-pox, and a red miliary Fever, are epidemic: The hooping Cough amongst Children.

S E P T E M B E R.

In the Beginning of this Month a south-west, or westerly Wind; from the 11th a continual East-Wind, frequent Calms however in the Middle

Middle of the Month with exceeding great Dews. At the Beginning and End of *September* the Air was very moist.

Rain $\frac{1}{1}$. 2. 4. 6. 8. 18. $\frac{11}{23}$. 24. 26. $\frac{11}{27}$.
 $\frac{1}{28}$ —30 = 1.300. Dig. Dec.

A small *AB*. 13. a Calm—a very great one 27. 10. p. m. a Calm.

Greatest Height of ☽	11. 30.0. E 1.	} Mean Altitude
Least	27. 29.2. S S E 2.	
Coldest Day	9. 42. W N W 1.	} Mean Altitude 32 $\frac{2}{3}$.
Warmest	1. 30. S W 1.	

The Small-pox here and there; a miliary Fever with very bad Symptoms is not uncommon: The Cholera Morbus is very frequent.

O C T O B E R.

In the Beginning of *October* a West-Wind with frequent Calms, on the 11th a south-east Wind sprung up, which continued almost to the 27th, only a north-east Wind blew from the 20th to the 22d: At the End a strong south-west Wind, the Baroscope falling greatly.

Rain 6. 9. $\frac{11}{13}$. $\frac{11}{14}$. $\frac{11}{15}$. 16. $\frac{1}{24}$. 25. 27.
 $\frac{11}{28}$. $\frac{1}{30}$. 31 = 2.366. Dig. Dec.

Thunder and Lightning on the 14th in the Evening, a Calm.

The Cholera Morbus still rages, a Fever often accompanying it, and sometimes a salutary

tary military Eruption.—The Colic also now prevails much.

NOVEMBER.

In the Beginning of this Month the Barometer was low, although an easterly Wind succeeded the West, and blew from the 5th to the 11th: From the 13th to the 23d a west, or north-west Wind, which lifted the Quicksilver; from that Time a north-east Wind, continuing to the very End, dispersed the Clouds very much, dried the Air, and brought in a sharp Frost.

Rain $\frac{1}{1}$ — $\frac{4}{5}$. $\frac{1}{7}$. $\frac{1}{8}$. $\frac{1}{9}$. $\frac{1}{10}$. $\frac{1}{14}$. $\frac{1}{18}$. $\frac{1}{20}$. $\frac{1}{22}$.
Dig. Dec.

Snow 28 = 2.356.

Greatest Height of	8	26. 30.2. NE 3.	} Mean Altitude
Least		8. 28.7. SE 3.	
Coldest Day	30. 66. NNE 1.		29.6 $\frac{2}{9}$.
Warmest	— 3. 40. W 1.		} Mean Altitude 50 $\frac{1}{2}$ $\frac{5}{9}$.

Very few Diseases this Month, nothing but a Colic, and that most commonly from the new Cyder.

DECEMBER.

The Barometer was high almost all this Month, a north, or north-west Wind prevailing, however a south-west Wind sometimes intervened, and brought Clouds and Rain — a Frost, and that a severe one, from the 19th to the

the 26th, a north-east Wind blowing furiously;
in the mean Time the Atmosphere was ex-
ceeding dry for the Season.

Rain 2. 5 — $\frac{11}{8}$. 10. 13. 15 — 17. 25. 28
Dig. Dec.
— 30. Hail 7. Snow 26 = 1.452.

A small northern Light 19. N 1. a Storm
13. late at Night N W.

Greatest Height of	☉ 1. 30.2. N N W 1. }	Mean Altitude
Least	6. 29.4. W b S 2. }	29.8 $\frac{8}{8}$.
Coldest Day 25. 67. N E 1 ^x .	} Mean Altitude	56 $\frac{1}{2}$ $\frac{2}{8}$.
Warmest — 12. 49. W N W 1. }		

The Colic is still epidemic, Rheums and
Catarrhs frequent.

The whole Quantity of Rain collected this
Year = 17.266, but a great Part of the Snow,
that fell in *January*, was lost.

N O T E S.

(A) I have often observed a considerable and
sudden Fall of the Quicksilver in the Barome-
ter when the Appearance of the Atmosphere,
at that Time, gave no Signs of such a Change;
but inquiring more diligently I found, either
that some heavy Showers had fallen, or there
had been Lightning and Thunder in the neigh-
bouring Country, the circumfused Air rushing
thither forthwith to restore the Æquilibrium.

(B) These inflammatory Disorders seemed to
have had their Origin from the long continued
Cold-

Coldness and Dryness of the Air, which had rendered the Fibres too tense, and the Blood more dense than it ought to be.—*Hippocrates* long since noted that cold northerly Winds created Coughs and Pains of the Side and Breast, Aphorism v. Sect. 3.—And I have also very often noted that the drier the Season the less the Expectoration, and the greater Difficulty in clearing the Lungs from the Matter, that loaded them, which however is unquestionably of the highest Importance in pulmonic Disorders: Scarce any Peripneumony is happily cured but by a large and free Expectoration. And there is nothing that promotes that Discharge more effectually than drinking freely and frequently of some warm antiphlogistic, nitrous, and gently detergent Liquor, especially after Bleeding to a due Quantity: But, if this doth not answer Expectation, Gum Ammoniac, Squill Medicines, the oily and detergent, proper Mercurials, and sometimes Volatiles, are to be added. But the Drinking of warm, nay hot Diluents is always necessary, especially in a very dry Constitution of the Atmosphere; for the very Vapour of it foment and relaxes the Lungs, and the Liquor keeps the Blood in a due Fluidity.—This Drinking of fervid Liquors (says *Baglivi*) is a Secret with me in dissolving obstinate Obstructions and Viscidities in epidemic and malignant Pleurifies,

fies, and in other Disorders of the Breast depending on such a Cause.

But if there is too great a Defluxion on the Breast and it is crude and acrid, we must endeavour to soften it with a proper Opiate, such as Syrup è Meconio, Laudanum, Elix Asthmatic. Pil. Mathæi. &c. and withall the sharp Humour should be diverted and drained off by Epispastics; and especially applied to the Legs, or Thighs, if there is a very great Difficulty of Breathing and Expectoration; for in such Cases they are exceeding useful—Even the great Father of Physic, *Hippocrates*, hath pronounced Ulcers in the Legs very useful, even in vehement Disorders of the Lungs, αἱ δὲ Ἀποσάσεις αἱ ἐς τὰ Σκέλεα, *Hippocr.* Lib. Prænotion.—How great a Consent there is between those Parts is evident from this one Observation, that old asthmatical Persons, that from thence fall into hydropic Swelling of Legs, are, by that, freed from the asthmatic Oppression, but, the Tumour vanishing by Art or Nature, they are immediately greatly oppressed again in Respiration.

But as it is of the highest Importance to promote Expectoration in a Peripneumony, so it is quite absurd to labour at it in a simple Pleurisy; for in that Disease nothing is so useful as large, frequent, and timely Bleeding, at

the same Time using free diluting, emollient Drinks, for this cherishes and dilutes the Blood, and withall relaxes the too rigid Fibres, and at length resolves the Obstructions; especially by the proper Use of Nitre and Camphor, to which are most usefully joined now and then some Opiates to abate the Vehemence of the Pain; for there is in the Juice of Poppies also a very great Power of Relaxing; whence in all Diseases that depend on too great a Stricture (as the Methodists call it) it is preferable to every Thing. And thus it restrains a too rapid Course of the Blood, and very greatly promotes also a Coction of the morbid Matter, and therefore you generally see a copious Sediment in the Urine after the Use of an Opiate,

In a true Pleurisy indeed Pectorals, oily Lohocæ, and Medicines of that Tribe, are no more indicated, or useful, than in an Inflammation of the Leg, or a Fit of the Gout; proper Fomentations are vastly more serviceable, and most commonly ease the Pain, and draw forth the morbid Matter—Nay in very obstinate and violent Pains Cupping-glasses, and these too applied on Scarifications of the Part affected, give the highest Relief, and that too when every Thing else had been almost quite ineffectual—*Celsus* therefore (Capit. de Laterum Dolore)

Dolore) advises “ Confugiendum ad Cucur-
 “ bitulas est antè summâ incisâ Cute.”—So
Aretæus Cappadox, de Curat. Pleuritid. Ἐπιδη-
 λοτάτον γὰρ ἐπὶ τῶν Πλευρίδων ἢ ἀπὸ Συκίης Ὠφελείη.
 And should not we apply the common Epi-
 spastics when the Case is urgent? The An-
 cients truly frequently used Epithems of Mus-
 tard on the Breast.—An honest Clergyman is
 now alive and very well, who many Years ago
 was seized with a most violent Pleurisy: He
 was bled largely, and repeatedly, but nothing
 relieved by it, nor did Anodynes, or Fomen-
 tations, much avail, the Pain very soon re-
 turning with Vehemence: At length I ordered
 slight Scarifications to be made on the Part,
 and Blood to be drawn thence by Cupping-
 glasses, and a Blister forthwith to be laid on
 them: The Event was that in a very few
 Hours the Pain utterly vanished and never re-
 turned. It is true indeed the Ulcerations were
 healed with much Difficulty—But what is that
 when otherwise a speedy Death would have
 been the Consequence?

As there is therefore so great a Difference
 between a Pleurisy and a Peripneumony, it
 will not be amiss perhaps to lay down here the
 diagnostic Signs of each.

It is the Nature of a Pleurisy to begin with
 a Rigor, or cold shivering Fit, to which pre-

sently succeeds a burning Heat, and these are soon followed by a vehement pricking kind of Pain in the Side, sometimes shooting back to the Spine, and sometimes up to the Clavicle, sometimes to the Fore-part of the Breast; and whilst those Symptoms rage there is a remarkable Hardness of the Pulse, vibrating as it were like a stretched Cord—These are the most truly pathognomonic Signs of a Pleurisy; for a Cough, with *Galen's* Leave, doth not always attend.

A Peripneumony, as *Celsus* says from *Hippocrates*, “ plus Periculi quam Doloris * habet; a Heaviness of the Lungs, and Difficulty of Breathing, an Oppression on the Breast, and a very hot Breath issuing thence, and a Kind of purulent Expectoration with a Fever and Cough, are the proper, and certain Signs of a Peripneumony.

I confess indeed that these Diseases, much more frequently than is commonly imagined, either make the Attack at one and the same Time, or a Peripneumony accedes to the Advance of the Pleurisy; and *Riolan* therefore very justly calls this Conjunction a Pleuripneumony—If you well consider the Seat of these two Diseases, you will easily see the Rea-

* Ἀπορία ἢ μὲν Φλεγμονὴ Πνεύμων, ἅπεν γὰρ ἡ φύσις αὐτίε. Aret. Cappad. Capit. de Peripneumon.

son why this very frequently happens—For the intercostal Arteries are sent off from the Aorta nearly at right Angles, and from these those that are spread on the Pleura; and from the Aorta likewise much, in the same Direction, the bronchial Arteries, that nourish the Substance of the Lungs, pass off—Now then, when the Blood is very viscid, and the Blood Vessels become very elastic, propel the Fluids with great Velocity, the most viscous Part of the Blood, as being the lightest, is forced to the Sides of the Aorta, the purer, heavier, and more mobile Part of it passing along nearer the Axis of that Canal—Hence this viscid Part is forced into the Arteries of the Pleura, and Membranes of the Lungs, which arise, as is said above, from the great Artery: Whence this very sily Blood, not fit to pass the minute Ramifications of these Arteries, creates Obstructions and Inflammations in them. I think every one may see, that it is so little to be wondered at, that a Peripneumony is conjoined with a Pleurisy, that the Wonder rather is, that it should not always be so, the same Cause urging; and this the rather as the Lobes of the Lungs very frequently adhere to the Pleura, and that even in those that are otherwise sound.

In the very Beginning of every true Peri-
I 3
pneumony

neumony it is very right to draw Blood from a large Vein by a large Orifice, that the Quantity and Force of the Blood may be diminished, and Room made for Diluents; and least, whilst the Inflammation is urgent in the Extremities of the bronchial Arteries, the extreme Ramifications of the pulmonary Arteries, being compressed by the bronchial, should be also obstructed, whence a most dreadful Peripneumony would be formed, and presently prove fatal, especially if many of the small pulmonary Arteries should be thus affected: In such Case scarce any Thing can avail but Drawing off a very large Quantity of Blood, nay even almost ad Deliquium.—But according to the greater or lesser Difficulty of Breathing a greater, or lesser Quantity of Blood should be drawn off, seeing the Pulse in this Disease is not a very faithful Monitor; forasmuch as the Impediment to the Motion of the Blood in the Lungs very strangely disturbs it; nay the Pulse, that could be hardly felt before Bleeding, oftentimes beats very strong after it—However Bleeding is seldom useful, or safe, after the fourth Day; especially if a yellowish Matter, mixed with a small Quantity of Blood, is very freely expectorated and with Ease. See the Note (B) *Novemb.* 1730.

I have

I have in a cursory Way set down these few Observations on Inflammations of the Breast; whoever would see more on this Head, and those perfectly accurate, let him read with the utmost Diligence the Aphorisms of the most consummate Physician, *Boerhaave*, Capit. de Peripneumon.

But alas! I just now hear that immortal Man is gone to the Gods, quem Sæcula nulla tacebunt.






OF THE CONSTITUTION

OF THE
AIR, and EPIDEMIC DISEASES,
In the YEAR 1732.

JANUARY.

 Northerly Wind blew at the Beginning of *January*, and produced a clear Sky, and a hard Frost, and made the Atmosphere exceeding dry; but this beautiful Weather was soon changed by a southerly Wind, and on the 15th and 16th a very heavy Rain fell; from thence a perpetual Calm almost till the 22d, afterwards a very variable Season, but mostly rainy, the Barometer falling.

Rain 8. 11. $\frac{11}{15}$. $\frac{11}{16}$. 17. 19. 22. 23. $\frac{1}{24}$.
 $\frac{1}{25}$. $\frac{11}{26}$. $\frac{1}{27}$. $\frac{1}{28}$. $\frac{1}{29}$ = Dig. Dec. 3.564.

A small

A small *AB.* the 18th a Calm.

Greatest Height of	☉ 21. 30.0. a Calm.	} Mean Alt. 29.6.
Least	———— 27. 28.9. S W 3.	
Coldest Day	9. 70. N 1.	} Mean Alt. 58 $\frac{5}{16}$.
Warmest —	26. 56. S W 2.	

Colical Disorders up and down; Cough, Hoarseness, Catarrhs, and Tumours of the Fauces very common,

F E B R U A R Y.

A West Wind prevailed all this Month, sometimes veering to the North, but more often to the South, a continual Rain almost falling, but not a very heavy one; no Frost.

Rain 2. $\frac{1}{4}$ — $\frac{1}{7}$ — $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{12}$. 14. 16. 19.
 $\frac{1}{21}$ — $\frac{1}{23}$. 25. 26. $\frac{1}{28}$ = 2.924. Dig. Dec.

A small *AB.* the 7th W 1. A Storm the 6th in the Morning S S W 4 $\frac{1}{2}$ —10th at Night S W b W.

Greatest Heat of	☉ 13. 30.1. W N W 1.	} Mean Alt.
Least	———— 7. 29.1. W 1.	
The coldest Day	3. 56. W N W 1.	} Mean Alt. 49.
Warmest —	— 4. 44. S S W 2.	

The same Diseases reign now, as in the former Months, but more severe; (A) the Hooping Cough frequent amongst Children.

M A R C H.

The Weather was very unsettled during this Month, sometimes stormy, often calm, the
 Wind

Wind continually varying, but chiefly from the North. At the Beginning, and towards the Close, the Baroscope was pretty high, and the Air dry and pure, but in the Middle of the Month, and at the very End, the Mercury fell and much Rain,

Rain $\frac{1}{1}$. 2. 5. 6. 7. 9. $\frac{11}{12}$. 13. $\frac{14}{14}$. $\frac{18}{18}$.

$\frac{11}{27}$. $\frac{11}{28}$ — $\frac{11}{31}$. Snow 10. 11 = 3.174. Dig. Dec.

Thunder and Lightning 28. p. m. A Storm the 2d at Night, W N W—a great Storm the 29th in the Morning, S E 4^x.

Greatest Height of ☿	4. 30.2. a Calm.	} Mean Altit,
Least	30. 28.8. E S E 3 ^x .	
Coldest Day	11. 64. N b W 1. a hard Frost.	} Mean Alt,
Warmest	20. 43. a Calm.	
		29.6 $\frac{1}{10}$.
		49 $\frac{2}{3}$ °.

Coughs and Catarrhal Disorders still; Pleurifies, Rheumatisms, Peripneumonies, chiefly however of the bastard Kind, rage here and there, as also the Small-pox.

A P R I L,

The Barometer was not very high at any Time this Month, although northerly Winds blew sometimes, and now and then a Calm intervened: In the Middle, and at the End of the Month, the Air was clear and very dry; from the 18th to the 24th moist, the Wind being southerly.

Rain

Rain $\frac{1}{1}$. $\frac{11}{3}$. 7. 10. $\frac{11}{15}$. $\frac{1}{18}$. $\frac{11}{19}$. $\frac{1}{20}$. 21.

22. 23. $\frac{11}{25}$. 27 = 2.196. Dig. Dec.

Greatest Height of ☿ 28. 29.7. N 1. } Mean Altit.
Least ————— 25. 29.2. S b W 3. } 29.4 $\frac{1}{2}$ $\frac{0}{9}$.
Coldest Day 16. 53. a Calm. } Mean Alt. 44.
Warmest — 27. 38. E S E 1. }

The same Diseases still continue; the Small-pox are epidemic in the Neighbourhood.

M A Y.

The Atmosphere was coldish this Month, from the 16th to the 22d very dry and fair; yet a Wind from the Southward sunk the Barometer.

Rain 1. $\frac{11}{3}$. $\frac{11}{5}$. $\frac{1}{8}$ — $\frac{1}{12}$. 22. $\frac{11}{23}$. $\frac{1}{25}$. $\frac{11}{26}$ —

Dig. Dec.

28. 30 = 2.424.

Greatest Height of ☿ 21. 29.7. N W 1. } Mean Altit.
Least ————— 27. 28.8. S S W 3. } 29.4 $\frac{2}{3}$ $\frac{0}{1}$.
Coldest Day 21. 50. N W 1. } Mean Alt. 40 $\frac{2}{3}$ $\frac{0}{1}$.
Warmest — 16. 36. a Calm. }

The Cholera Morbus here and there, a Diarrhœa common: A very severe Cough torments a great many Infants, and Children, and often throws them into Convulsions.

J U N E.

From the Beginning of *June* to the 18th scarce any Rain, the Atmosphere in the mean Time

Time was exceeding dry, and very pure, but often a little cold; from the 5th to the 12th an East Wind, or a Calm; from the 19th to the 22d a heavy Rain, the Wind westerly; but a North Wind afterwards raised the Barometer: Very great Dews this Month, especially towards the End.

Rain 17. $\frac{1}{19}$. $\frac{1111}{20}$ — $\frac{111}{22}$. 24 = $\frac{1}{270}$. Dig. Dec.

Greatest Height of ☿ 26. 30.0. NNW 1. } Mean Alt.
 Least ————— 10. 29.2. a Calm. } $29.6\frac{2}{3}$.
 Coldest Day 2. 40. NW 1. }
 Warmest — 28. 26. N 1. } Mean Alt. $31\frac{1}{2}$.

Compound miliary Fevers, and the Swine-Pox, in several Places.

J U L Y.

At the Beginning of *July*, and towards the End, the Air was very dry, for the Wind was from the North, but very gentle; but from the 8th to the 14th much Rain, the Wind at South: Frequent Calms in this Month, and great Dews.

Rain 8. $\frac{1111}{9}$ — $\frac{11}{11}$ — $\frac{111}{13}$ — $\frac{1}{14}$. 22. $\frac{1}{27}$. 28 =
 Dig. Dec.
 2.288.

Greatest Height of ☿ 1. 29.8. a Calm. }
 Least ————— 12. 29.0. SSE 2. } Mean Alt. $29.5\frac{1}{3}$
 Coldest Day 14. 38. SSW 1. }
 Warmest — 31. 24. NNW 1. } Mean Alt. $29\frac{1}{3}$.

An exceeding healthy Season.

A U G U S T

AUGUST.

At the Coming in, and Going out of *August*, an Easterly Wind very much dried the Atmosphere; between the 9th and 26th it varied now to the South, now to the North: Very little Rain fell this Month, but an immense Quantity of Dew.

Rain 9—12. 19. $\frac{1}{23}$ = 0.362. Dig. Dec.

Greatest Height of ☿	30. 29.9. E b N 2. }	Mean Alt.
Least	12. 29.2. S 2. }	29.5 $\frac{1}{2}$.
Coldest Day	31. 38. E b N 1. }	Mean Alt. 28 $\frac{1}{3}$.
Warmest	19. 23. S 2. }	

Fluxes of the Belly frequent; Intermittents up and down the Country—The Measles began to appear towards the End of the Month—Coughs trouble many of the Horses.

SEPTEMBER.

Till the 10th of *September*, the Barometer was high, and a brisk Wind from the North rendered the Atmosphere very clear, but from the 10th to the 25th a south-west, or north-west Wind blew, and much Rain fell; from thence to the End an East Wind,

Rain $\frac{11}{11}$. $\frac{12}{12}$ — $\frac{15}{15}$. $\frac{17}{17}$. 18. 19. 21. 23.

$\frac{17}{27}$ = 3.050 Dig. Dec.

A Storm the 26th at Night E S E. Thunder the 12th at Night, S W 1.

Greatest

Greatest Height of ☿ 2. 30.1. N E 22.
 Least ————— 13. 29.0. W N W 2. } Mean Alt. 29.6.
 Coldest Day 30. 45. E 3.
 Warmest —10. 29. S W 2. } Mean Alt. 35.

The Measles are epidemic—The Cough and Strangles are every-where raging amongst the Horses, and kill very many.

O C T O B E R.

Almost a perpetual, and often a very heavy, Rain fell this Month, Winds from the South in the mean Time blowing very stormy, the Mercury fell very greatly; but a northerly Wind towards the End raised it, and dried the Air.

Rain $\frac{''}{2}$ — $\frac{''}{5}$. $\frac{'''}{7}$. $\frac{''}{9}$. $\frac{'''}{11}$. $\frac{'}{12}$. $\frac{''}{14}$ — $\frac{''}{16}$. 17. $\frac{''''}{19}$.

$\frac{'''}{20}$. $\frac{'}{21}$. $\frac{'''}{23}$. $\frac{'}{24}$ — $\frac{'}{26}$. $\frac{''}{28}$ = 6.342. Dig. Dec.

A Storm the 14th p. m. Thunder and Lightning the 22d in the Morning S b E 2.

Greatest Height of ☿ 30. 29.8. N N E 1. } Mean Alt.
 Least ————— 14. 28.7. S W 4x. } 29.2 $\frac{6}{9}$.
 Coldest Day 31. 52. E b N 1. }
 Warmest — 1. 34. E 1. } Mean Alt. 38 $\frac{5}{9}$.

Coughs, Catarrhs, and Measles exceeding common—The Disease amongst the Horses now rages violently.

N O V E M B E R.

The Air was very dry and thin, and the Wind from the East or the North, all the Month

Month of *November* ; from the 6th to the 10th it blew very furiously : From the 20th to the very End there was every Morning a very great Hoar-Frost and Ice, a gentle Wind blowing from the North.

Rain 1. 2. 10—12. 16—18. 19. 30 =
Dig. Dec.

0.584.

A stormy North Wind the 6th about 9 at Night.

Greatest Height of ☿	25. 30.4. NE b N 1.	} Mean Alt.
Least	12. 29.4. E S E 1.	
Coldest Day	29. 63. NE 1.	} Mean Alt. 55 $\frac{1}{3}$.
Warmest	1. 48. E S E 1.	

Measles still continue, and the epidemic Disease amongst the Horses.

D E C E M B E R.

The northerly Wind continued till the 10th, then an E S E ; from the 16th to the End a south, or south-west Wind, very much Rain falling, and the Baroscope sinking greatly : The Atmosphere at the Beginning was very dry and cold, and there was a hard Frost ; but from the 16th it was warm, foggy, and moist.

Rain 4. $\frac{''}{13}$ — $\frac{'}{16}$. 18. $\frac{'''}{19}$. $\frac{''''}{20}$. 22. $\frac{'}{23}$. $\frac{'}{24}$.
 $\frac{'''}{25}$. $\frac{''}{26}$. $\frac{'}{27}$. $\frac{''}{29}$. $\frac{'}{30}$. 31 = 4.928.
Dig. Dec.

Lightning

Lightning the 20th and 21st at Night: A Storm the 29th at Night S_{4x}: Snow the 10th E b N 1.

Greatest Height of ☿	2. 30.2. NE 1.	} Mean Alt. 29. 5 $\frac{1}{2}$ $\frac{9}{8}$.
Least	31. 28.8. S W 2.	
Coldest Day 6. 66.	NE 2.	} Mean Alt. 54 $\frac{1}{2}$ $\frac{3}{8}$.
Warmest—25. 44.	S 1.	

Coughs, Catarrhs, and Squinries are very frequent: The Disease amongst the Horses still continues, but is much lessened.

The whole Quantity of Rain 1732 =
Dig. Dec.
33.096.

Of the convulsive Hooping Cough.

BLEEDING, says *Sydenham*, is of vast Advantage in the convulsive Cough of Children, and is far more useful than any Kind of Pectorals—*Harris* de Morb. acut. Infant. is of the same Opinion.—Oily and mucilaginous Medicines, in that Distemper, I utterly condemn, as they are apt to increase, and certainly do not carry off, the Disease, though they are so much in the common Practice.

I will set down therefore what I have, by long Experience, found most useful in this Disease.

If there are evident Signs of a Plethora, or the Matter expectorated is tinged with Blood,
I always

I always order Bleeding, and that especially if there is a feverish Habit (as is commonly the Case) or the Patient grows black in the Face with Coughing: And this I repeat sometimes according to the Age and Strength of the Sick.—I soon after give a gentle Vomit of Syrup of Peach-Blossom, Oxymel of Squills, or an Infusion, or Decoction of Ipecacoanha—For the Cough is partly at least, from the Stomach, as *Waldschmidt* observed, for the Paroxysm of the convulsive Cough scarce ever ceases before the tough, irritating Pituita, or Phlegm, is thrown up by Vomiting; yea there is often such a Quantity of that slimy Matter, that it is necessary to provoke Vomiting three or four Times.

Stools are likewise to be promoted, but by gentle Cathartics only, as Rhubarb, Mercurius Alkalizatus, Calomel; for the mucous Filth is by this Means carried off, so that it may neither spoil the Chyle, nor, by entering the Lacteals with it, the Blood—Costiveness is certainly hurtful, for it brings on a feverish Heat, and increases greatly the Difficulty of Breathing.—Nor are Evacuants only necessary, for such Medicines as may strengthen the Nerves and Stomach, and break the Lentor of the Blood, are needful: And this is best of all effected by Mercurials, and the *Peruvian Bark*, joined with Stomachics. In the mean Time the Difficulty of Breathing and Oppression on the


Breast require a Solution of Gum Ammoniac, Expreſſion of Millepedes, or the like; the Vehemence of the Cough alſo muſt be mitigated by Elixir Aſthmat. le Mort. out of Syrup of white Poppies; which is indeed the beſt and ſafeſt Anodyne in this Diſeaſe.

By this Method and thoſe Medicines this Malady is eaſily cured, which oftentimes otherwiſe proves very obſtinate, and not to be removed but by Time, and Change of Air: The celebrated Specifics, as they are called, of the old Women, are as far as I have obſerved mere Trifles: nay the Cup-moſs, if it hath any Virtue at all, acts as an Aſtringent and Corroborant, and by that Means ſomewhat approaches to the Nature of the *Peruvian-Bark*—But this noble *Indian-Bark* not only attenuates ſlimy, viſcous Humours, but at the ſame Time ſtrengthens and confirms the whole Syſtem of the Solids; and, acting in this double Capacity, it conquers intermittent Fevers—And indeed the periodic Acceſſions of this convulſive Hooping-Cough, frequently not leſs certain than the Paroxyſms of an Intermittent, ſeem to ſhew, that this Diſeaſe is not greatly different from the Nature of an intermittent Fever; and this ſeems the more probable alſo as both the Diſeaſes reign in the ſame Conſtitutions of the Atmosphere, depend much on the ſame Cauſe, and are cured nearly by the ſame Remedies.



O F T H E
C O N S T I T U T I O N
O F T H E
A I R, and E P I D E M I C D I S E A S E S,
In the Y E A R 1733.

J A N U A R Y.

 N the Coming in of the Year frequent Rain, and a humid Atmosphere, but soon after an easterly Wind scattered the Vapours, which continued from the 16th to the 25th, the Barometer rising. Very little Frost this Month, nay towards the End the Air was very hazy, and warm for the Season.

Rain 1—4. 5. 7. 8. 9. 15. 22. 29. 30.

Dig. Dec.

31 = 2.384.

K 2

A Storm

A Storm the 7th at Night S; Frost 14
N W 1—21. E N E 2.

Greatest Height of ☿	24. 30.2. E 1.	} Mean Alt. 29.7 $\frac{2}{3}$ $\frac{6}{10}$.
Least	8. 29.3. S W 3.	
Coldest Day	21. 62. E N E 2.	} Mean Alt. 51 $\frac{2}{3}$ $\frac{5}{10}$.
Warmest	28. 47. S 1	

Coughs, Catarrhs, and Measles, exceeding
common.

F E B R U A R Y.

A westerly Wind blew all the Month of *February*, veering often to the South, and sometimes to the North: The Air in the mean Time was moist and cold, but not so thick as in the preceding Month.

Rain $\frac{''}{1}$ — $\frac{'}{4}$ — $\frac{''}{6}$. $\frac{'}{7}$. $\frac{'}{8}$. $\frac{'}{11}$. 14. 17— $\frac{'''}{20}$. $\frac{'''}{22}$.

$\frac{''}{24}$. $\frac{'}{28}$ = 3.734. Dig. Dec.

A Storm the 1st at Night S W: A small
AB. the 2d H. 10. p. m. N N W 1.

Greatest Height of ☿	15. 30.0. N N W 1.	} Mean Altitude
Least	4. 29.2. S W 2.	
Coldest Day	10. 60. N W 1. Ice; and a great	} Mean Alt.
Hoar-Frost.		
Warmest	7. 49. S S W 2.	

The Measles have destroyed many Children, suffocated in a peripneumonic Manner at the Decline of the Disease: Nothing was of Service but seasonable Bleeding.

At this Time a Distemper infested this Country, of all, that ever I remember, the most
epidemic;

epidemic ; it seized upon Rich and Poor, scarce any escaped, Old or Young, Strong or Infirm, either in the Town, or Country.—As therefore it affected all so greatly (and that too sooner, or later, over a great Part of the Earth) I think it proper to give an accurate Account of the Disease as we had it here.

From the very Begining of *February* both in *Cornwall*, and in the hither Parts of *Devonshire*, this Epidemic had raged, but it did not attack us at *Plymouth* till the 10th of this Month, being *Saturday*, on which a very great Number were as it were suddenly seized, the next Day an infinite Number felt it, and by the 15th almost every Person every-where.

The Disease began with a slight Shivering, which was soon succeeded by an uncertain erratic Heat, a Heaviness and Stoppage of the Head, great and very troublesome Sneezings, wandering Pains of the Limbs, but especially in the Back, and often in the Breast, but not fixed, tho' on Account of the violent Cough frequently very troublesome. By Cough and Sneezing a vast Quantity of thin acrid Mucus was thrown off—These seemed only to be the Symptoms of a fresh Cold, as they call it: However soon after some Degree of Fever came on ; sometimes indeed not a small one, and the Pulse grew very quick, but by no Means hard and tense, as that of Pleuritics,

nor was the Urine very high-coloured, but thick, and for the most Part whitish and turbid. The Tongue was not dry but daubed over as it were with a great deal of whitish Mucus. All complained of Want of Sleep; a Giddiness, or sharp Pain of the Head, afflicted very many, and sometimes a slight Delirium: A Noise in the Ears was troublesome to a vast many, and not a few had an acute Pain in the Meatus auditorius, which sometimes ended in an Imposthume, but a Soreness and Abscess of the Fauces were much more common. All were very apt to sweat; which being plentiful, easy, and continued, within two or three Days, carried off the Fever intirely, the Urine deposing a large Quantity of whitish, or yellowish Sediment, rarely however truly lateritious: But a great many, whether from the profuse Sweats, or the Epispastics that were applied, I will not say, rendered it with Pain and Difficulty.—Bilious Stools also frequently carried off the Disorder—And sometimes an Eruption of smarting, itching Pustules.

This is a Description of the epidemic Distemper, as it raged with us here, and which almost every one felt more, or less; but exceeding few, considering the Number affected, died of it, and amongst those were chiefly Children, and old asthmatic People.

It went off within the short Space of four Days for the most Part, a troublesome Cough only remaining, and that sometimes very obstinate ; but it left a greater Weakness and Dejection of Spirits than one would have believed, considering the short Duration and Mildness of the Disorder, especially if an unreasonable Bleeding had preceded—Bleeding relieved those chiefly, who had great Pain or Load at the Breast, and that too indeed at the Beginning, not in the Decline of the Fever : The Blood almost of every one was covered with a whitish Pellicule, not very tough, unless Bleeding had been neglected too long, and the Fever had ran into a Pleurisy, or Peripneumony ; which truly was often the Case, especially after a too great Use of Volatiles, or the hot Cordials.

A Nausea and Urging to Vomit demanded a gentle Emetic, which both took off the Sickness at Stomach, and Oppression of the Breast greatly : It moreover promoted the Sweats, to help forth which much warm, diluting Drink, even though the Thirst might not be urgent, was altogether necessary ; for without some Sweat I scarce ever saw a happy Issue to the Disease : Diluting, warm, Wine-Whey answered that Intention as well as any Thing ; and indeed we made so much Use of it, that

we could scarce get Milk enough to make a sufficient Quantity.

Blisters were very useful, nay necessary, applied behind the Ears and between the Shoulders, for they gave certain Relief to the Head, and Soreness and Swelling of the Throat; besides they averted the great De-fluxion of the acrid Matter from the Lungs.—The general Medicines, I advised, in the Distemper were chiefly Lap. Contrayerv. Sp. Vol. oleos.—C. C.—Lavend. C. Elix. Asth-mat. le Mort. and a Solution of Sperm. Ceti in Draughts, with some thin pectoral Decoc-tion, or very thin Whey; which both very happily promoted the Sweats, and moderated the Cough also—But when the Respiration grew more heavy, and the Expectoration more difficult, after Bleeding, a Solution of Gum. Ammoniac. and Oxymel Scillitic. were alto-gether necessary, for now the Disease seemed to put on the Nature of a Peripneumonia no-tha, and required quite the same Method of Cure, that is proper in that Disorder; to wit very inciding Pectorals, Blisters to the Legs, sometimes Emetics or gentle Cathartics.

The Cough was very impetuous through the whole Course of the Disorder, sometimes in-deed so vehement, that it was not a little dif-ficult to quiet it by Anodynes; nay it was sometimes so very stubborn after the Fever

was quite gone, that it hurried several, a Month or two afterwards, into a fatal Consumption, especially such, who formerly laboured under a Weakness and Disorder in their Lungs. But, after I had frequently observed that the Cough went off on the Coming on of a Diarrhœa, I gave gentle Laxatives of Manna, Rhubarb, Tartar Solubile, &c. on the Decline of the Fever, repeatedly, and that as usual, by following Nature, with the desired Success: And these soon also restored the Appetite, which was exceedingly palled all the Time of the Disease.

This Distemper verily was seldom fatal, unless on the Commission of some great Error in the Management of it; Many however, despising it, as it was so very common, paid dear for their Rashness, and thence became asthmatic, hectic, and consumptive.

M A R C H.

To a warm *January* and *February* succeeded a somewhat colder Season at the Beginning of this Month, for the Wind was northerly, and the Barometer rose; afterwards a south-east Wind sunk the Mercury, and brought much Rain. From the 8th to the 22d the Air was tolerably dry and thin, but from that Time much more moist.

Rain

Rain 1. $\frac{1}{7}$. $\frac{1}{8}$. 14—16. 17. $\frac{11}{23}$ — $\frac{11}{25}$ — $\frac{11}{27}$.

$\frac{1}{28}$. Snow 10. $\frac{1}{21}$. Hail 9. 19 = 3.098. Dig. Dec.

A small AB. the 21st 10. p. m. N W 1.
A sharp Frost the 10th and 11th.

Greatest Height of ☿	3. 30.2. N N W 1.	} Mean Alt.
Least	— 21. 28.9. S E 3.	
Coldest Day	10. 62. N b E 1.	
Warmest	— 28. 44. E S E 2.	} Mean Alt. 52 $\frac{2}{3}$.

In the Beginning of the Month the catarrhal Fever was every-where vastly epidemic, which still continues, and now also Squinzies, Pleurifies, and Peripneumonies both of the true and bastard Kind, are frequent.

A P R I L.

An easterly Wind bending often to the North prevailed all the Month of *April*, which made the Air dry and cold, particularly towards the Close of it; however Calms ever and anon, and sometimes foggy Mists intervened.

Rain $\frac{11}{8}$. $\frac{111}{13}$. 15—17. 18. $\frac{111}{22}$ = 2.284. Dig. Dec.

Greatest Height of ☿	29. 30.0. a Calm	} Mean Altitude
Least	— 13. 29.1. S E 1.	
Coldest Day	27. 50. N E 3.	} Mean Alt. 42 $\frac{2}{3}$.
Warmest	— 22. 38. a Calm.	

The epidemic Fever is still up and down the Country, and many are now in a consumptive Way

Way from the ill Effects of it, and an unfavourable Crisis : Many are seized with Pleurifies and Peripneumonies.

M A Y.

This Month the Barometer kept commonly at a middle Station, the Wind blowing daily from the East, the Atmosphere was exceeding dry and thin : From the 12th not a Drop of Rain fell, but very great Dews, and there were frequent Calms.

Rain $\frac{''' }{6} - \frac{' }{8}$. 10. $\frac{' }{11}$. 12 = 1.010. Dig. Dec.

Greatest Height of ☿	22. 29.8. E 1.	} Mean Altitude
Least	7. 29.2. a Calm.	
Coldest Day	5. 46. E 2	} Mean Altit. 37 $\frac{1}{2}$ $\frac{0}{7}$.
Warmest	30. 28. a Calm.	

Several are attacked with pulmonary Fevers, several with Intermittents. Not a few now die tabid, an Imposthume frequently breaking on their Lungs, more especially those, who fell into a Consumption from the late epidemic Fever ill-judged, and who from thence had watery Swellings of the Feet.

J U N E.

Variable Winds this Month, often from the East, but more frequently south-westerly, a Calm sometimes intervened—The Air was dry at the Beginning ; at the End both dry and hot—A very great Dew often.

Rain

Rain $\frac{''}{5}$. $\frac{'}{8}$. 9. 13. 15— $\frac{'}{19}$. $\frac{'}{20}$. 25—1.534. Dig. Dec.

A very great *AB*. at Midnight the 27th
WNW 1. Lightning the 12th at Night, Thunder the 26th.

Greatest Height of ☿	22. 29.8. a Calm.	} Mean Altit.
Least	18. 28.8. S b W 3.	
The coldest Day	21. 36. W 2.	} Mean Alt. 28 $\frac{2}{3}$ $\frac{6}{10}$.
Warmest	27. 24. W 1.	

Remittent and intermittent Fevers still, now often with scarlet Pustules.

J U L Y.

All the Month of *July* the Air was very dry and very hot, little Rain, but exceeding great Dews; we had seldom a southerly Wind, but a north, or north-westerly Wind often, and yet the Quicksilver in the Barometer was for the most Part low.

Rain 14. $\frac{'}{15}$. $\frac{'}{16}$. 21. $\frac{'}{28}$. 30. 31. Hail
 $\frac{'}{16}$ Dig. Dec.
 $\frac{'}{16}$ = 0.772.

A great *AB*. the 10th. 10. p. m. NW 1.
Thunder the 16th p. m. SSE 2—28 p. m.
NNW 1.

Greatest Height of ☿	1. 29.7. NNE 1.	} Mean Altit.
Least	29. 29.0. NbW 1.	
Coldest Day	31. 34. NW 1.	} Mean Alt. 24 $\frac{8}{10}$.
Warmest	5. 16. NW 1.	

Intermittent Fevers found up and down—
A Cholera

A Cholera Morbus and Diarrhœa frequent. Very many Women labour under a vastly profuse menstrual Discharge. Almost every one complains of great Faintness from the excessive Heat of the Season.

A U G U S T.

We have had a perpetual westerly Wind all this Month, bending often to the South, often to the North—In the former Part Rain, Thunder, and Lightning were frequent, fair Weather ever and anon intervening.

Rain 1. $\frac{''}{3}$. $\frac{''}{4}$. 6. $\frac{'''}{7}$. $\frac{'''}{10}$ — $\frac{'}{12}$. 16. $\frac{''}{17}$. 18.

$\frac{''}{21}$. 24. $\frac{''}{27}$ —29. $\frac{''}{31}$ = 4.500. Dig. Dec.

Vehement Thunder and Lightning the 3d, 6th, 7th, and 10th—A Storm the 17th at Night S W.

Greatest Height of ☿	24. 29.9. N N W 1.	} Mean Alt.
Least	7. 29.0. S S W 1.	
Coldest Day	24. 43. N N W 1.	} Mean Alt. 32.
Warmest	5. 24. S W 1.	

Very few Diseases now; some however are seized with a Looseness and Cholera Morbus.

S E P T E M B E R.

The Wind and Weather was various this Month, from the 9th however to the 18th it blew from the East, the Wind declining for the most Part to the South. The Atmosphere
was

was dry and the Station of the Barometer generally higher than in the Month of *August*; great and frequent Dews.

Rain $\frac{1}{1}$. $\frac{1}{2}$. 3. $\frac{5}{5}$. 11. 12. $\frac{13}{13}$. 14. 21. 24.
 $\frac{25}{25}$. 26. 28. 30 = 1.978. Dig. Dec.

A great *AB.* the 8th, 10 p. m. N N W 1.—
 A small one the 29th H. 9. p. m. W N W 1.
 Thunder and Lightning the 12th and 13th a. m.
 Lightning the 26th at Night.

Greatest Height of $\frac{8}{8}$ 19. 30.1. a Calm. } Mean Alt.
 Least ———— 26. 29.0. S W b W 2. } 29.6 $\frac{9}{29}$.
 Coldest Day 30. 49. N N E 1. }
 Warmest — 5. 33. S W 2. } Mean Alt. 37 $\frac{28}{29}$.

Coughs and Catarrhs very frequent: The Cholera Morbus and Diarrhœa raged much at the End of the Month.

O C T O B E R.

An east, or north-north-east Wind blowing often this Month rose the Barometer much, and made the Air dry and cold, although Fogs frequently intervened; at the Beginning of the Month much Dew.

Rain $\frac{1}{1}$ —2. $\frac{11}{11}$. 23—25. $\frac{27}{27}$ —29 = 2.026. Dig. Dec.

A great *AB.* the 27th 9. p. m. W N W 1.
 Very great Hoar Frosts the 15th and 16th N N E 1. Ice the 31st N N E 1.

Greatest Height of $\frac{8}{8}$ 18. 30.2. E 1. } Mean Altitude
 Least ———— 25. 28.8. S W 3. } 29.7 $\frac{1}{2}$.
 Coldest Day 31. 60. N N E 1. }
 Warmest — 3. 37. $\frac{5}{5}$ S W 1. } Mean Alt. 46 $\frac{34}{34}$.

The

The Cholera and Diarrhœa still continue : A Kind of pustular scorbutic Eruption, without a Fever, is common ; some Apoplexies : Several peripneumonic Fevers : The Swine-Pox, and colical Disorders are rife.

NOVEMBER.

A westerly Wind prevailed in *November*, bending often to the North, although the Air was more warm than usual, towards the End it was thick and moist.

Rain 7. 9. $\frac{1}{10}$. $\frac{11}{11}$. $\frac{1}{12}$. 14. 15. 17. 20.
 21. $\frac{1}{26}$. 28—30 = 1.882. Dig. Deg.

A great *AB.* the 27th at 2 in the Morning
NW 1—29. 10. p. m. NW 1. A Storm the
20th at Night S 4.

Greatest Height of ☽ 5. 30.2. N N W 1. } Mean Altit.
 Least ————— 11. 29.1. S W 3^x. } 29.7 $\frac{2}{3}$ $\frac{2}{3}$.
 Coldest Day 5. 58. Ice. }
 Warmest —15. 44. S 2. } Mean Alt. 48 $\frac{2}{3}$ $\frac{2}{3}$.

Some Swine-Pox still, pulmonary Fevers
and colical Disorders here and there.

DECEMBER.

This Month of *December* was exceeding stormy, almost a continual Storm, and that often very violent, which continued from the 9th to the 23d; it came from the South-West with much Rain, and sometimes horrible Thunder and

and Lightning: At the Beginning indeed of the Month the Weather was somewhat fair with a thin Ice, but the Air was very thick, the 5th Day it was very foggy and exceeding dark. Perhaps the immense Quantity of Vapour, that was in the Atmosphere, partly at least, supported the Mercury in the Barometer, which otherwise the perpetual Storms would have probably sunk much lower.

Rain 1. $\frac{1}{2}$. $\frac{1}{9}$. $\frac{1}{11}$. $\frac{1}{12}$. $\frac{1}{13}$ — $\frac{1}{15}$. $\frac{1}{16}$. 17.

$\frac{1}{20}$ — $\frac{1}{22}$. $\frac{1}{23}$ — $\frac{1}{25}$. $\frac{1}{26}$ — $\frac{1}{29}$. $\frac{1}{30}$. 31 = 4.688. Dig. Dec.

Great Storms the 11th, 12th, 14th, 16th, 22d, 23d, and 26th; exceeding high Tides from the 12th to the 14th.

Most violent Thunder and Lightning with vehement Hail the 12th; a long continued Storm of Lightning and Thunder the 16th S W b W 4.

Greatest Height of $\frac{1}{8}$	6. 30.1. N N W 1.	} Mean Alt.
Least	14. 29.1. S W b W 4 ^x .	
Coldest Day	7. 62. E 1.	} Mean Alt. 49 $\frac{2}{3}$.
Warmest —	14. 43.	

In the Beginning of the Month the Colic and bastard Peripneumony with nervous Affections: Coughs and Catarrhs very frequent towards the End—And hysterical and hypochondriacal Paroxysms.

The whole Quantity of Rain this Year
Dig. Dec.
= 29.884.



OF THE
CONSTITUTION

OF THE

AIR, and EPIDEMIC DISEASES,

In the YEAR 1734.

JANUARY.

THE Sun at length breaks forth after a very gloomy Season, for the new Year is ushered in with a much more chearful Face of the Heavens.: Just after the Begining of *January*, a north-east Wind sprung up, and scattered the Clouds and Vapours, a serene Sky came on and a smart Frost ; however the Atmosphere became much more warm at the going out of the Month.

Rain 1. $\frac{11}{2}$. 8. 16. $\frac{11}{2}$. Snow and Hail 4. 5.

Dig. Dce.

= 1.480.

A Storm the 2d W S W. Thunder and

L

Lightning

Lightning with much Rain the 22d in the Morning.

Greatest Height of ☿	29. 30.4.	E b N 1.	} Mean Alt.
Least	3. 29.4.	W 2.	
Coldest Day	14. 71.	E N E 1.	} Mean Alt. 60 $\frac{4}{5}$.
Warmest	—26. 54.	N W 1.	

Catarrhs and Coughs are frequent; many colical Disorders, and Peripneumonies up and down.

F E B R U A R Y.

The Barometer stood high till the 11th of February, a north-west Wind then blowing; from the 15th to the 18th, a perpetual Storm, nay sometimes exceeding violent: A vehement Gust of Wind again from the West the 24th and 25th, a prodigious Quantity of Rain then falling, and the Mercury sunk greatly: Scarce any Frost except at the Beginning of the Month.

Rain	2.	3.	4.	$\frac{///}{12.}$	$\frac{///}{13-15.}$	$\frac{///}{16.}$	$\frac{//}{17.}$	$\frac{//}{18.}$
	$\frac{///}{19.}$	$\frac{/}{22.}$	$\frac{///}{23.}$	$\frac{///}{24.}$	$\frac{///}{25.}$	$\frac{///}{26.}$	$\frac{///}{27.}$	= 5.554.

Dig. Dec.

Lightning and Hail the 17th at Night
W N W 2.

Greatest Height of ☿	1. 30.4.	N E 1.	} Mean Altitude
Least	24. 28.5.	S b E 4.	
Coldest Day	1. 62.	a Frost.	} Mean Altitude 53 $\frac{8}{10}$.
Warmest	—12. 50.	S W 2.	

Peripneu-

Peripneumonies at the Begining of the Month ; in the Advance of it Squinzies, Catarrhs, and Coughs in Abundance,

M A R C H.

The Wind was westerly also during all this Month, for the most Part bending to the South, which made the Air thick and moist, and brought frequent Rains, at the End however it inclined somewhat to the North.

Rain 1—4. 5. 6. 9. 10. 12—14. 16—18.

19. 20. 22. 23—25. 28 = 2.812. Dig. Dec.

A Storm the 19th at Night, S 4_x.

Greatest Height of ☉	31. 30.0. W N W 1. }	Mean Alt.
Least	13. 29.0. S W b S 2. }	29.5.
Coldest Day	15. 56. W N W 1. }	Mean Altitude 48 $\frac{7}{10}$.
Warmest	23. 45. W b S 1. }	

Coughs, Tumours of the Fauces, Running of the Eyes, frequent this Month ; many are seized with a Rheumatism, some with a Peripneumony, others with a Paraphrenitis : Many Apoplexies towards the End.

A P R I L.

Not a Drop of Rain fell till the 18th of April ; from the 1st to the 12th a north-west Wind, from thence to the 23d it was easterly, afterwards from the South-west : In the Middle of the Month the Air was dry and thin.

Rain 18. ¹/₁₉. 20. ^{'''}/₂₂. ¹/₂₃. ^{''}/₂₅. ^{'''}/₂₆. 27. 29.

Dig. Dec.

30 = 2.126.

Greatest Height of ☿	12. 30.0. N N W 1.	} Mean Alt.
Least	23. 29.4. E S E 2.	
Coldest Day	13. 50. E N E 1.	} Mean Alt. 43 $\frac{2}{3}$.
Warmest	28. 37. W S W 2.	

Cough and Swelling of the Throat still frequent: Not a few Intermittents, and some Apoplexies—Inflammations of the Eyes up and down.

This Month a Kind of anginose Fever, if I may so call it, began to rage, and became daily more and more violent—Those whom it seized were first of all taken with a Chilness, and soon after with a wandering uncertain Heat, and Head-Ach, to which succeeded forthwith a Vomiting, or Looseness, and in a very little Time an acute Pain and Swelling of the Fauces with no small Degree of Fever, Languor, Anxiety and Load at Breast; a Delirium, or comatose Affection accompanying often, the too sure Presages of which were either very thin and limpid, or very turbid, Urine without any Sediment—In such Circumstances, it was happy for the Sick if either copious Sweats, or red Pustules broke forth, or, if those failed, something of an Erysipelas; if nothing of this Kind happened Death was at Hand, unless a seasonable Diarrhœa, or a

timely Bursting of an Abscess in the Fauces, or a critical Swelling behind the Ear, saved the Patient.

This Disease was often carried off within six Days, but many Times it continued longer, and vanished intirely on the Eruption of crystalline, or miliary Pustules in Abundance about the 7th, 8th, or 9th Day, provided they did not præmaturely recede, which was certain Destruction to the Sick—The same may be said of the red Papulæ which often broke out also about the Crisis of the Disease.

This Fever chiefly attacked Children and young Persons, who frequently discharged Worms : People of an advanced Age were seldom affected by it—The Urine was for the most Part yellowish or reddish, and deposited a Kind of Brick-coloured Sediment, even from the very Beginning : The Tongue had generally a thick yellowish Coat.

This Fever required Bleeding at the very Beginning of the Attack, and it was often necessary to repeat it sometimes, even to a third Time, when the Symptoms were violent ; the Blood however was seldom very viscid, sometimes sufficiently florid : The Stomach was then to be cleansed by a Vomit, and forthwith Blisters to be applied to the Neck, Ears, and Shoulders. A plentiful, warm, but antiphlogistic Drink was altogether necessary, a gentle cordial Medicine

being often interposed, such as Lap. Contraryerv. Saffron, Theriac. Andromachi Confect. Fracastor. *Raleigh's* Cordial, &c. and that especially, as the State of the Disease approached; and in a particular Manner if the cuticular Eruption turned blackish, which was an exceeding bad Symptom.

Emollient, subacid, detergent Gargarisms were very necessary and useful to cleanse the ulcerated Throat gently and often, swallowing, after the Use of the Gargle, a Mucilage of Quince-Seed and Flea-Bane sweetened with Syrup of Mulberries, or Raspberries; an anodyne oily Mixture was convenient when the Cough, as often happened, was greatly troublesome.

As soon as ever the Skin grew rough, and covered as it were with a branny Scurf, gentle Purgatives of Rhubarb, &c. with some Kind of Mercurials, were very beneficial, and soon restored perfect Health.

M A Y.

A westerly Wind, bending mostly to the North, blew almost all this Month, a south-east Wind however sometimes intervened: The Temper of the Atmosphere was much colder than usual; the Station of the Barometer commonly low.

Rain

Rain $\frac{1}{1}$. 7. 11. 12. 15—18. 21. $\frac{111}{25}$. 26.
28—30. Snow the 13th. Hail the 14th =
Dig. Dec.

1.764.

Small northern Lights, 14. 15. N W b N 2.
Thunder and Lightning 28. p. m.

Greatest Height of ☉	10. 29.9. N 1.	} Mean Altitude
Least	29. 29.0. S E 2.	
Coldest Day	14. 52. N N W 2. unusual Cold.	} Mean Alt.
Warmest	25. 37. a Calm.	
		42.

The convulsive Hooping-Cough is frequent amongst Children ; several intermittent Fevers.—Now the epidemic, anginose Fever rages very greatly—The Squinzey is more severe, and very frequently attended with a most troublesome Thrush, and a violent Cough, that almost strangles the Sick unless they are perpetually almost gargling their Throats, and sipping something warm.

J U N E.

An easterly Wind blew almost daily from the 6th to the 20th, at the Beginning and End a north-west Wind—The Atmosphere was more warm and moist than in the preceding Month ; both the one and the other were very cloudy.

Rain $\frac{1}{2}$. $\frac{111}{6}$. $\frac{1}{8}$. 10. $\frac{1}{11}$. $\frac{111}{14}$. $\frac{11}{15}$. 20. $\frac{1}{21}$.
 $\frac{111}{23}$. 26. $\frac{1}{29}$ = 3.208.
Dig. Dec.

L 4

Greatest

Greatest Height of ☉	4. 29. 7. N W b W 1.	} Mean Alt.
Least	24. 29. 1. W N W 1.	
Coldest Day	20. 40. S E b E 1.	} Mean Altitude $31\frac{1}{9}$.
Warmest	22. 26. a Calm.	

Intermittent Fevers are still common, Ophthalmies frequent. The epidemic Disease is now attended with all Kinds of Pustules almost, and sometimes with an erysipelatous Eruption; however the Fauces are less affected, as the Distemper now tends more to the Skin—On the 6th or 7th Day, the Cuticula becomes rough, broken and scurfy, as if coarse Bran had been thrown on it, and the more of this the better; at length it almost all desquamates, sometimes in such large Skins from the Feet, that you would think the whole Sole of the Foot almost had come off at once—This is the most happy Issue of the Distemper—But when the Exanthemata came out slowly and sparingly, and afterwards turned livid, very great Anxieties, Languors, Faintings followed, and frequently soon after enormous Vomiting and Purging, which too often soon snatched off the Sick. This Fever, as almost all that are accompanied with Pustules, is contagious; for I have often found several lying ill of it in the same House—The Reason why the Disease affects the Skin more in this, than the former Month, I take to be from the greater Warmth of the Air, which more invited the morbid Matter outwards; for in the Middle of *May*,
when

when the Atmosphere was very cold, for that Season of the Year, the Pain and Swelling of the Fauces were greatly more severe.

The same Method of Cure is still useful, but now Mercurials, prepared without any Kind of stimulating Salts, are most aptly joined to it : For, as we find them very beneficial in other cutaneous Disorders, why should not they be so in this ? Nay even in the Small-pox truly I have very often given them with very great Advantage : For they break the slimy, viscous Humours, open the glutinous Obstructions in the very small Vessels, and prevent the too great Cohæsions of saline Moleculæ: In a Word they render the morbid Humours fluxile, and at length drive them out of the Body, and yet, whilst they act thus only by their Momentum, and Subtility of Parts, they very little heat the Blood.

J U L Y.

The former Part of *July* was fair enough, but coldish, the Wind commonly from the North; about the Middle of the Month came on a south-west Wind with Rain, then the North-Wind returned ; from the 25th to the 28th, a rainy south-east Wind—On the 31st, the Wind changing and shifting every Moment, an immense Quantity of Rain fell, like a Cataract, between Eight in the Morning and Noon, to at least an Inch perpendicular, though about fifteen

teen Miles to the Eastward there scarce fell any : The Air was very moist this Month, and the Barometer low.

Rain $\frac{1}{12}$. $\frac{1}{13}$. $\frac{1}{14}$. 16. $\frac{1}{17}$. $\frac{1}{26}$ —29. $\frac{1}{31}$ =
Dig. Dec.
2.982.

Greatest Height of ☽	5. 29.8. N 1.	} Mean Altitude
Least	26. 28.9. S E 3.	
Coldest Day	3. 38. N 1.	} Mean Altitude 29.4 $\frac{1}{3}$ $\frac{1}{1}$.
Warmest —	24. 24. a Calm.	

There are still intermittent Fevers: Coughs frequent amongst grown People, convulsive Coughs amongst Children: Very great Complaints every-where of great Lowness of Spirits—Many of our singing Birds die in casting their Feathers.

The epidemic Fever still rages, and carries off some, even within six Days, in unspeakable Agonies; these were first of all seized with a slight Delirium which indeed was of worse Omen than if, like mad Bacchanalians, they had broke out into an open and violent Phrenzy; nothing was then more useful than drawing off Blood by Scarifying and Cupping on the Neck and Shoulders, then giving lenient Clysters, or gentle Cathartics, and moreover sometimes applying Blisters to the Legs and Thighs especially, as well as elsewhere.

A U G U S T.

Fair Weather at the Begining, but, about
the

the Middle of *August*, very much Rain, and too much also at the End of it: A south-south-west Wind blew frequently, and that too at the Close of the Month very furiously, which sunk the Barometer very much, and rendered the Air exceeding moist. There were very great Dews at the Beginning of the Month, a North-Wind blowing: A turbulent South-Wind, in the Night between the 9th and the 10th, sunk the Barometer very much, and with it a most heavy Rain fell, but the Tide was lifted exceedingly.

Rain $\frac{''' }{9}$ — $\frac{' }{10}$. $\frac{'' }{12}$. $\frac{''' }{13}$. 14. $\frac{'' }{16}$. 17. $\frac{' }{19}$. 23.
 25. 26. $\frac{'' }{28}$. $\frac{' }{29}$. $\frac{'' }{30}$. 31 = 4.022. Dig. Dec.

A Storm the 9th at Night S S E 4—28. at Night S W 4_x—29. at Night S W 4_x—30. W S W 4_x with Thunder and Lightning.

Greatest Height of ☿ 3. 29.8. N 1. Least ————— 10. 28.7. S S W 3 _x . Coldest Day 31. 42. S W 3. Warmest — 7. 24. N b W 1.	} Mean Alt. } 29.3 $\frac{2}{3}$ 7. } Mean Alt. 30 $\frac{2}{3}$ 1.
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The epidemic Fever still greatly afflicts many Persons, oftentimes with very great Vomiting and Purging: Several labour under Inflammations of the Eyes; the Itch is very frequent.—The Small-pox now begin to spread, and slow nervous Fevers also.

Many of our singing Birds die in Moulting: You scarce hear a Grasshopper.—The Summer bath

hath been more cloudy, cold, and rainy, than usual; all Places are now full of Water and Mud.

S E P T E M B E R.

Almost all the Month of *September* the Wind was westerly, but for the most Part bending to the North, which lifted the Mercury in the Barometer, but the Atmosphere continues still moist, and a little cold.

Rain $\frac{''}{1}$. $\frac{''}{2}$. $\frac{'}{3}$. 8. 17. 20. $\frac{''}{21}$. 22 — 24.
 $\frac{''}{27}$. 28. 30 = 1.752. Dig. Dec.

A small *AB*. the 9th, 10. p. m. N N W 1.
 A Storm 21. p. m. S W — 24. at Night W S W 4_x — Vehement Hail 22. W N W 2. A very great Hoar-Frost 26. N b E.

Greatest Height of ☿	17. 30.0. a Calm.	} Mean Altitude
Least	1. 29.0. W 2.	
Coldest Day	26. 54. N b E 1.	} Mean Altitude 41 $\frac{1}{2}$ $\frac{8}{7}$.
Warmest	1. 36. —	

The epidemic Fever is now almost vanished, and the Small-pox are not much increased in Number: The Cholera, nervous, miliary, and intermittent Fevers, up and down.

O C T O B E R.

In the Begining a stormy south-west Wind brought in much Rain, the 4th Day a boisterous south-east Wind, from the 15th to the

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23d a brisk North-Wind, which lifted the Mercury very considerably; at the End a north-west Wind: The Air is cold and moist.

Rain $\frac{''}{1}$. $\frac{'''}{2}$. $\frac{''}{3}$. $\frac{''}{4}$. 5. 7—10. $\frac{'''}{11}$. $\frac{''}{12}$. $\frac{'}{13}$.

$\frac{'}{15}$. 19. 21. 23. 26. 28. 29 = 3.154.
Dig. Dec.

Thunder, Rain, and Hail 2. p. m.—Hail the 7th and 8th. Lightning and Thunder the 12th p. m. Very great Tides from the first to the fourth.

Greatest Height of ☿	22. 30.3. E N E 1.	} Mean Alt.
Least	4. 28.8. S E b E 3 ^x .	
Colest Day	19. 64. N N E 2.	} Mean Altitude 51.
Warmest	— 1. 43. S W 4 ^x .	

The Small-pox are now epidemic. Colical Disorders, from the new Cyder, are now vastly frequent.—Catarrhs and Tumours of the Fauces are pretty common; indeed I find some Relics of the Epidemic here and there still. The nervous and miliary Fever up and down.

N O V E M B E R.

From the first of *November* to the twentieth the Wind stood between the West and the North, which both made the Atmosphere a little more dry, and much more cold, and rose the Baroscope greatly; but between the 21st and 24th very much Rain fell with a blustering south-west Wind, and the Mercury sunk very much,

much, but a North-Wind soon returning raised the Mercury, and cleared the Weather.

Rain 1. $\frac{1}{4}$. $\frac{1}{7}$. 10. 21. 22. $\frac{1}{23}$. $\frac{1}{24}$. 29 =
Dig. Dec.
2.068.

A Frost, and that too sometimes pretty hard, was frequent this Month.

Greatest Height of ☿ 27. 30.4. N N E 1. } Mean Altitude
Least ————— 23. 28.8. S W 3. } 29.8 $\frac{2}{29}$.
Coldest Day 27. 68. N N E 1. }
Warmest — 2. 52. a Calm. } Mean Altitude 58 $\frac{1}{29}$.

Colical Disorders and the Small-pox very epidemic; many Apoplexies; the bilious Colics up and down.

D E C E M B E R.

A rainy, stormy, horrible Season closed this Year, there was scarce a dry Day throughout the whole Month of *December*, a most vehement south-west Wind raged very frequently every now and then with heavy Rain; whence the Baroscope was often surprisngly low*. There are now very great Floods every-where. The Air was exceeding moist, scarce any Frost, though the Atmosphere was often very cold.

Rain 1— $\frac{1}{4}$ — $\frac{1}{6}$. 7. $\frac{1}{9}$. $\frac{1}{10}$ — $\frac{1}{12}$ — $\frac{1}{14}$. $\frac{1}{15}$.
 $\frac{1}{17}$. 18. 20— $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{26}$ — $\frac{1}{28}$. $\frac{1}{29}$. $\frac{1}{31}$ =
Dig. Dec.
6.192.

A Storm

A Storm the 1st S W—the 10th p. m. S W b S
4—the 14th early in the Morning, and conti-
nuing S W 4^x—the 26th W N W—the 27th
W 4^x—the 29th W S W 4.

Greatest Height of ☉	25. 30.0.	N W b W 1.	} Mean Alt.
Least —————	14. *28.2.	S W 4 ^x .	
Coldest Day	22. 64.	N N E 1. Frost.	} Mean Altit. 58 $\frac{4}{14}$.
Warmest —	1. 52.	W S W 2.	

The Small-pox are very epidemical, and
frequently mortal : Colics are not so common,
many labour under Rheumatisms ; several pu-
trid and petechial Fevers.

There was a vast Quantity of Rain fell this
Dig. Dec.
Year, 1734, viz. = 37.114.





OF THE
CONSTITUTION


OF THE

AIR, and EPIDEMIC DISEASES,

In the Y E A R 1735.

J A N U A R Y.




 Although the Barometer was very high at the Beginning of *January*, and the Wind northerly, yet a stormy Season, sometimes exceeding violent, which continued from the 6th to the 14th, sunk it almost to the very lowest Pitch; however afterwards, viz. from the 20th to the very End, a northerly Wind blew and raised it again very high: The Atmosphere was cold; and often very moist: Hard Frost at the Close of the Month.

Rain 2. 5. $\frac{''}{6}$. $\frac{''}{7}$. 8. $\frac{''' }{10}$. $\frac{'}{11}$. $\frac{''}{13}$. $\frac{'}{14}$. $\frac{''}{18}$.
 Dig. Dec.
 19. 22. SNOW 9. 11 = 2.526.

A Storm

A Storm the 6th at Night S W 4^x—A most violent Storm the 8th, about Noon, sunk the Quicksilver to 28. 3. S W 4^x—Violent Storm continued till the next Morning, and the Barometer sunk to 28. 1. I have seldom or never known the Quicksilver in the Baroscope lower.

Greatest Height of ☿	4. 30.5. N b W 1.	} Mean Altitude
Least	11. 28.1. S 4 ^x .	
Coldest Day	25. 70. N 1.	} Mean Altitude 59 $\frac{2}{3}$.
Warmest	— 6. 54. S W 3.	

The Small-pox are greatly epidemic, some very malignant, as sometimes Hæmorrhages attend them from all Parts of the Body, and livid and (A) black Petechiæ also; I scarce knew one recover that was seized with those Symptoms; for in such a pestilential Kind the Crasis of the Blood is utterly dissolved, and the Humours are very putrid; nay the Blood that was drawn did not in the least coagulate as usual, but remained quite fluid, like a putrid Sanies.

Colical Disorders with severe rheumatic Pains, and sometimes with a Kind of Palsy of the Hands and Arms from drinking the new Cyder, are still frequent. Many Coughs about the End of the Month. Ophthalmies, miliary and erysipelatoſe Fevers up and down.

F E B R U A R Y.

The Quicksilver in the Barometer retained its high Station till the 16th, a North-Wind

M blowing,

blowing, or a South-east.—Towards the Close of the Month a rainy South-Wind sunk the Baroscope.—There was clear Weather several Times this Month, but Frost seldomer than common.

Rain 8. 14. $\frac{11}{17}$. 18. 22. $\frac{11}{23}$ — $\frac{11}{26}$. 27 =
Dig. Dec.
1.978.

A Storm the 26th at Night S S W 4x.

Greatest Height of ☉	2. 30.5. NNE 1.	} Mean Altit.
Least	27. 29.0. S S W 3x.	
Coldest Day	21. 66. ENE 1. hard Frost.	} Mean Altitude
Warmest —	9. 52. a Calm.	
		29.7 $\frac{1}{2}$ $\frac{0}{5}$.
		57 $\frac{1}{2}$ $\frac{8}{5}$.

Pleurisies and Peripneumonies frequent, but chiefly in the Country; the Small-pox are still epidemic, but not so fatal.

There now rages amongst the lower Class of People a Kind of contagious Fever, often accompanied with Pustules and Petechiæ; a very unhappy Import brought in here by the Fleet, as there is great Reason to believe; inasmuch as the same Kind of Distemper had been long before severely felt amongst the Sailors at *Portsmouth*, and destroyed many of them.—But more of this in the following Month.

M A R C H.

The Weather was variable through the Month of *March*, and the Station of the Barometer as variable, viz. now high, and then
very

very low: A south-west Wind at the Begining, from the 6th to the 17th a south-east Wind, then north, and afterwards north-west; the Atmosphere was sufficiently cold, but pretty moist.

Rain 1. 2. $\frac{''}{4}$. $\frac{'}{5}$. 14. $\frac{''}{15}$. $\frac{''}{16}$. $\frac{'}{23}$ — $\frac{'}{25}$. 28.
 $\frac{'}{30}$. 31 = 2.234.
 Dig. Dec.

An exceeding great Tide the 15th in the Morning S b E 3^x. Frost from the 20th to the 23d.

Greatest Height of ☾	21. 30.0. N E 2.	} Mean Altitude
Least	16. 28.7. S S E 3.	
Coldest Day	20. 64. N b E 2.	} Mean Altitude 54 $\frac{4}{5}$.
Warmest —	15. 50. S b E 3.	

The Small-pox are as yet epidemic; Pleurifies and Peripneumonies common, some Apoplexies.

The contagious Fever spreads now vastly, especially amongst the common People.—They who are attacked with it are first of all seized with a slight Shivering, and a Sort of universal Lassitude, a Sicknefs at Stomach, and vertiginous Pain of the Head, soon succeeds, and yet no very vehement Fever follows, or immoderate Thirst, although the Middle of the Tongue was rough and brown, nay oftentimes very dry, but, on both Sides, it was covered with a whitish Mucus. In the mean Time the Sick made great Complaints of their Throat, and a Tendernefs of the Eyes, that would

scarce bear the Light ; the Pain of the Throat seemed sometimes as if it would strangle them. —The Urine was often turbid and furfuraeous (*Οὐρον κριμνώδες Hippocrat.*) sometimes thin, small in Quantity, lurid like vapid small Beer: Such Kind of Urines are of very ill Omen in all Species of Fevers. Thus Things went on for about four Days, in which they lay altogether wakeful, or were utterly insensible of the exceeding short and greatly disturbed and broken Sleep they now and then had: And now a Deafness and slight Delirium came on, frequent Sighing, and an immense Oppression on the Præcordia, with a Tremor and Subfultus of the Hands and Tendons; and yet, when you asked them how they were, they scarce complained of any Thing, so far had a Kind of Stupidity advanced on them.

About the sixth Day, now sooner now later, red, purple, livid, or black Spots appeared, and sometimes a Sort of large livid Blotches, or Marks.—These were of very bad Prognostic, and so much the worse the more they approached to black.—Frequently also we discovered an immense Number of exceeding small Petechiæ of a dark yellow or brown Colour resembling Freckles of the Skin, or Flea-bites, but a little blacker; these I observed no less fatal than the very blackest.—In this State of Things either a perpetual Sopor

hung

hung on the Sick, or a mad Kind of Fury so greatly violent oftentimes, that it was not easy for those, that attended the Sick, even though very strong, to keep them in Bed, which they attempted to get out of to go somewhere else; and indeed I scarce knew any Symptom more fatal than this.

Whilst they were in this miserable Condition a profuse, clammy, stinking Sweat, or a most foetid, livid, Diarrhœa melted down the Patients.—Moreover a black and excessive dry Tongue, a very faltering and scarce utterable Speech, Hiccup, Spasms, a creeping, small, and excessively quick irregular Pulse, Lividity of the Hands, and sometimes of the Arms up to the Elbows, were the certain Preludes to a speedy Dissolution on the 11th, or 14th Day, for the most Part; sometimes much sooner.—So great and so sudden was the Putrefaction of the Dead, that it was often absolutely necessary to bury the Corpse within four and twenty Hours.

This was a terrible and melancholy State of Things! But there were very many, who met with a better Fate; who had a favourable Crisis the 4th or 5th Day by an Eruption of red miliary Pustules, and a kindly warm Sweat over the whole Body.—Many however, struggling long under the Disease, had at length an innumerable Quantity of miliary, limpid, clear Pus-

tules, which often proved salutary—in a great many however the Issue was doubtful and dangerous.

A P R I L.

From the 2d of *April* to the 10th we had an easterly Wind, after which the Wind was very variable, as well as the Weather; but for the Season of the Year cold and moist.

Rain 1. $\frac{1}{8}$. $\frac{1}{9}$. 10. $\frac{1}{14}$ — 16. $\frac{1}{18}$. $\frac{1}{20}$. 22.
 24. $\frac{1}{27}$. $\frac{1}{29}$ = 2.251. Dig. Dec.

A very vehement Wind the 22d at Break of Day W N W—a stormy Night the 26th S 4.

Greatest Height of ☉	16. 29.9. E S E 2.	} Mean Altitude
Least	10. 28.8. S E 2.	
Colest Day	7. 54. E b S 2.	} Mean Altitude 46 $\frac{20}{29}$.
Warmest	25. 42. W N W 1.	

The Small-pox are now more numerous; and the anginose miliary Fever, which reigned here last Spring, now infests our Neighbourhood.—The contagious malignant Fever now rages more than ever; but the choaking Pain of the Fauces now seldom attends, and there are but few Pustules break out, but in Place of them brown, black, purple, Spots appear, and too frequently the livid Blotches, which always denote Danger.—Many die.

M A Y.

A north-east, or north-west, Wind blew from the first to the twenty-fourth Day of *May*, afterwards

terwards a south-east, the Weather was very cold and cloudy: Exceeding great Dews from the 12th to the 14th.

Rain 1. 11. 12. ¹¹15. 17. 20. 22. ¹¹23. 24.
 Dig. Dec.
 26. ¹30. 31 = 1.646.

Vehement Hail the 23d, Thunder and Lightning the 30th.

Greatest Height of ☽	19. 30.1. NW 1.	} Mean Altitude
Least	16. 29.1. SE 2.	
Coldest Day	14. 54. NW 1.	} Mean Altitude 43 ⁶ / ₃₁ .
Hottest	31. 36. S SE 1.	

Many are seized with Apoplexies, the Small-pox yet; the contagious Fever hath destroyed very many, and that too notwithstanding the utmost Assistance, that could be given them.—The following Method however preserved a very great Number.

In the very Beginning of the Disease Bleeding was useful, very seldom afterwards, nay, when rashly repeated, it was often exceeding hurtful: However, if the Head-ach, and Vertigo were very urgent, after Bleeding it was proper and beneficial to draw off some Blood by Cupping-Glasses on the Neck and Shoulders, previously scarified; which also rendered the Vomit, to be given after it, more safe.—I scarce ever saw the Blood very buffy, but the Serum was commonly green, and sometimes of a reddish Colour, which is always of ill Omen; for those,

who had it so, had very certainly very black Petechiæ, or Vibices with a continual Phrensy, or heavy Coma. A Nausea almost constant, and frequent bilious Vomiting, always demanded a gentle Emetic, by which the Filth and Load of the Stomach was to be evacuated, and a dangerous Diarrhœa which would otherwise always come on at the State of the Disease, or a little after it: for where the Saburra of the Stomach remains in it a considerable Time it grows more and more acrid, and at length, descending through the Intestines, it exceedingly irritates them.

Epispastics were necessary at all Times of the Distemper, applying some afresh as soon as the former were removed; moreover the continual Languor, and daily Sinking of the Spirits, required the frequent Repetition of Cordials, which had the further Effect also of promoting seasonable, and often critical Sweats, or Pustules--In this View Confect. Cardiac. Theriac. Andromach. Lap. Contrayerv. Rad. Serpentar. Virgin. Sometimes Salts of Harts-Horn, and, where it was not very disagreeable to the Stomach, Camphire (serviceable in more Ways than one, as more happily producing Sleep and quieting the Delirium than Opium) were the most adapted Remedies.—And truly I have found Red-Wine and a little Water, mulled up with Cinnamon and
Mace,

Mace, altogether as effectual in supporting the Spirits, as the most celebrated Alexipharmac; and that too not only in this Disease, but in all slow nervous Fevers; especially attended with colliquative Sweats, or ending in an immoderate Diarrhœa.—At length indeed I learnt that mild astringent Aromatics, by preserving a due Crasis of the Blood, and strengthening the Tone of the Fibres, were the true alexiterial Cordials in this Distemper, and would probably have proved successful Antidotes—The ancient Physicians always mixed some astringent Medicines in the Composition of their Antidotes and Alexipharmacs, as is everywhere to be seen in perusing them.

To this End therefore, with happy Success, after the State of the Disease, I gave some Preparation of the Cortex Peruvianus, with proper Alexipharmacs and acidulated with *Mynsicht's* Elixir of Vitriol, nor did I idly wait for a laudable, and, as they call it, a lateritious Sediment in the Urine, if so be I had only observed a very small Remission of the Fever—If this *Indian Bark* is of such great Service in a Gangrene of a particular Part, why should it not avail greatly in a universal Corruption of the Humours—The black Spots, livid Blotches, and the exceeding speedy Corruption of the dead Bodies were evident Indications of a gangrenous Disposition of the Blood.

Certainly

Certainly in long lingering Fevers nothing is more necessary than to keep up a due *Æquilibrium* between the Solids and Fluids; nothing is more useful to that End than to supply the Blood continually with some proper diluting Liquor, and to conserve the Tone of the Fibres by proper Medicines; till at length Nature assisted by these Means conquers the Disease, and expels it by a happy Crisis—For, as an ardent Fever always requires a Bridle, the slow Fever very often demands Spurs—Indeed a Crisis is always to be attempted by Art, when Nature is unequal to the Task, and can do nothing further—When Fevers therefore decline very slowly, gentle Cathartics are often of very great Use, Cordials also being taken withal: In this Fever, of which we have been treating, when scarce any thing else seemed to avail, Rhubarb given daily was very beneficial, in the mean Time frequent sipping mullied Wine; for by this Method the putrid morbid Matter was carried off, and the Strength in the mean while was supported.

J U N E.

A north-west Wind blew very frequently this Month, a pretty brisk south-west Wind also now and then; a South-east from the 19th to the 22d: The Air was for the most Part very cold, thick and humid.

Rain

Rain 1. 3. 4. $\frac{11}{11}$. 15. 16—18. $\frac{11}{19}$. $\frac{1}{20}$ —

Dig. Dec.

22. 25. 26. 28 = 1.936.

Greatest Height of ☿ 5. 29.9. N W 1. } Mean Alt.

Least ——— 18. 29.1. S W 3. } 29.5 $\frac{7}{25}$

Coldest Day 2. 44. N W 1. } Mean Alt. 36 $\frac{6}{25}$.

Warmest—14. 34. a Calm.

The small Pox and intermittent Fevers are pretty common. The red miliary Fever with enormous Vomiting and Purging rages still in the Country.—The contagious Distemper abated a little towards the End of the Month.

J U L Y.

The Air hath been exceeding moist and cold all this Month, the Wind most commonly from the west, or southern Quarters, sometimes however from the East—It hath been indeed a cloudy, rainy and very melancholy Season, more like Winter than Summer. All the Fruits of the Season are sour, and unripe: You scarce hear a Grass-hopper, or see a Butterfly: Many of our singing Birds die in casting their Feathers.

Rain 1—3. $\frac{11}{6}$. 7. 10. $\frac{11}{11}$. 12. $\frac{11}{14}$. $\frac{11}{15}$.

Dig. Dec.

16. $\frac{1}{19}$. 21. 22. $\frac{11}{25}$ —27. 30 = 3.536.

A Storm the 11th at Night W b S. Thunder

der the 30th, p. m. Flashes of Lightning at Night.

Greatest Height of ☿	28. 29.7. S E 1.	} Mean Alt.
Least	16. 28.9. S W 3x.	
Coldest Day	19. 42. S S W 2.	} Mean Alt. 34 $\frac{2}{3}$.
Warmest	30. 30. W 1.	

The contagious epidemic Fever is here greatly diminished, but still rages in the Neighbourhood : Many still lie ill of the Small-pox ; the (B) Itch is frequent.

A U G U S T.

From the 2d of *August* to the 13th, the Wind was perpetually from the East, in the mean Time we had a fine warm Season, after that a dreadful, horrid, stormy one followed : I never knew the Atmosphere so moist at this Time of the Year : Every Place is full of Mud and Water—The Birds die in Moulting, the Bees make little or no Honey —The Leaves of Trees fall as if it was in the Midst of Autumn.

Rain 1. 2. $\frac{''''}{14}$. 18. $\frac{''}{19}$. $\frac{''''}{21}$. $\frac{''}{22}$. $\frac{''}{23}$. 25—
 $\frac{'}{29}$. 31 = 2.906.
 Dig. Dec.

Vast Dews during the fair Weather, in the Beginning of the Month.

A great AB. the 20th N W 1. A Storm the 22d, p. m. S W—A violent one the 23d at Night S S W.

Greatest

Greatest Height of ☿	12. 29.9. E 1.	} Mean Alt.
Least	22. 29.2. S W 4.	
Coldest Day	27. 42. W N W 1.	} Mean Alt. 32 $\frac{6}{5}$.
Warmest	13. 26. E 1.	

We still find here and there fatal Relics of the malignant Fever, the Small-pox as yet up and down: Scabby Eruptions, and the Itch frequent: Many afflicted with the Cholera and Diarrhœa. A great Number of Persons are greatly dispirited and listless from the untoward, wet, heavy Season. Many Dogs run mad.

S E P T E M B E R.

This Month was cloudy, moist, and cold, a north-west Wind blew often, sometimes the South-west, but more frequently the East, especially towards the End: A north-east Wind the 8th, 9th, and 10th.

Rain 1. 3. 6. 7. $\frac{1}{11}$. $\frac{1}{12}$ — $\frac{1}{14}$ — $\frac{1}{16}$. $\frac{1}{17}$.

Dig. Dec.

18. 20. 22. 24. $\frac{1}{26}$. 28. 29 = 1.918.

Greatest Height of ☿	23. 29.9. E 1.	} Mean Alt.
Least	11. 29.2. W N W 1.	
Coldest Day	28. 46. S E 1	} Mean Alt. 36 $\frac{1}{8}$.
Warmest	3. 30. N W 1.	

Petechial Fevers are still scattered up and down; the Small-pox frequent: Many are troubled with Purging and Vomiting; and many with Coughs at the Close of the Month.

O C T O B E R.

Almost a constant easterly Wind through the whole Month of *October*, at the Beginning and End it inclined to the North; hence the Atmosphere became thin and a little colder—A South-Wind in the Middle of the Month.

Rain $\frac{''}{7}$. $\frac{''}{8}$ —10. 12. $\frac{''}{14}$. $\frac{''}{26}$. $\frac{''}{27}$ = 2.756. Dig. Dec.

A small *AB*. 3. A Calm—the 4th *E* 1—the 12th *N* 1. Ice and a very great Hoar-Frost the 30th *E N E* 1.

Greatest Heat of	8	30.	30.1.	<i>E N E</i> 1.	} Mean Alt.
Least		9.	29.1.	<i>W N W</i> 1.	
Coldest Day	30.	64.			
Warmest	—26.	40.	<i>S S E</i> 2.		} Mean Alt. 47 $\frac{2}{3}$.

Many slow and intermittent Fevers; some are seized with a sudden asthmatic Oppression, and then fall into hydropic Swellings of the Feet and Abdomen, of which some have soon died. Many Mad-Dogs.

N O V E M B E R.

A very rainy and stormy *November* follows, towards the End of the Month especially; a turbulent South-Wind greatly prevailed, and made the Atmosphere very thick and moist—At the Close of the Month great Inundations every-where.

Rain $\frac{''}{4}$. $\frac{''}{5}$ —7. $\frac{''}{9}$. 10. $\frac{''}{13}$. $\frac{''}{14}$. $\frac{''}{15}$ —17
 $\frac{''}{19}$. $\frac{''}{21}$ —23—25. $\frac{''}{26}$. $\frac{''}{27}$. 29 = 4.922. Dig. Dec.
 A great

A great Storm the 9th from 10 a. m. to 2. p. m. S W 4^x —the 23d the whole Day S W—the 26th at Night S 4_x —the 27th S 4^x . Very great Tides the 27th, although the Moon was then in its Quadrature, nay they were higher than usual at New, or Full-Moon. Violent Thunder the 24th at Night.

Greatest Height of ☉	11. 30.0. N W 1.	} Mean Alt.
Least	27. 28.4. S 4^x .	
Coldest Day	1. 58. a Calm.	} Mean Alt. 49 $\frac{1}{3}$.
Warmest	—19. 44. S S W 2.	

Head-Ach, Vertigo, epileptic Fits, Tumours of the Fauces and Parotids are frequent : Great Heaviness of the Breast and Difficulty of Breathing afflicts several. Many Mad-Dogs running up and down.—Many slow nervous Fevers*.

D E C E M B E R.

I scarce ever remember the Atmosphere to have been so moist as it hath been during the whole Month of *December*, although an easterly Wind blew fresh very often ; indeed it must be owned that a moist, rainy, southerly Wind very often intervened.

Rain	$\frac{1}{1}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{9}$	$\frac{1}{17}$	$\frac{1}{19}$	$\frac{1}{24}$	$\frac{1}{25}$
	1.	4.	5.	6.	7.	9.	17.	19.	24.	25.
	Dig. Dec.									
$\frac{1}{28}$	$\frac{1}{30}$	$\frac{1}{31}$	$= 2.364.$							

Hard Frost the 12th 66 E b N 1—the 13th 64 E 1—the 16th E 1—the 23d 64 E 1.

A Storm

* See the Dissertation on slow nervous Fevers at the End.

A Storm the 24th at Night, Sb E—the 27th
S W b W 4^x—Very great Tides the 21st and
22d, E S E 2—Exceeding great the 24th,
25th, and 26th, S 4.

Greatest Height of ☽	21. 30.0. Eb S 2.	} Mean Alt.
Least	28. 29.0. S W b W 3 ^x .	
Coldest day	12. 66. Eb N 1.	} Mean Alt. 54 $\frac{8}{27}$.
Warmest —	1. 46. W b S 2.	

Coughs, Tumours of the Neck and Fauces,
Hoarseness, oftentimes with a small Fever,
very frequent: Several putrid nervous Fevers..

The whole Quantity of Rain this Year was:

Dig. Dec.

(C) = 30.974.

(A) These Spots seem to be formed by
the Dissolution of the Globules of the Blood,
the broken Particles entering into the serous
Arteries, and there, not finding a free Pas-
sage, stick and form Petechiæ, or livid Blot-
ches, as is seen in Contusions, where the red
Blood is forced into improper Vessels, not
adapted to receive it, and thus discolour the
Skin—They are always Marks of a pestilen-
tial Disposition of the Blood, and that it is
greatly dissolved and grown putrid; nay the
Blood is often actually so dissolved that it runs
off in profuse Hæmorrhages. Which also fre-
quently happens to the Scorbutic, where there
is

is not the least Sign of a Fever, although the whole Body is covered with purple Spots; and yet a fatal Hæmorrhage often soon follows, though there was not the least previous Suspicion of it—The Blood in such a State is found always quite dissolved, and never forms into a Coagulum, as usual. Austere Acids, opportunely given, certainly benefit greatly such Scorbutic Persons, as I have often seen. In such petechial Small-pox therefore, and other spotted Fevers, they may be of the greatest Service—Truly Bleeding in such Cases seems to do much more Harm than Good.

(B) Is there not some peculiar Disposition in the Atmosphere to produce cuticular Eruptions? Surely at the same Time that the Small-pox, and pustular Fevers, are rife, all Kinds of Eruptions, as the Rash, Itch, Erysipelas, &c. are common; as is very frequently observed—Nay it hath been long and commonly known, even amongst old Women, and Nurses, that the Measles and Swine, or Chicken-pox, are very often Harbingers to the Small-pox—May we not hence then form a useful Precaution by Way of Preservative? Perhaps soft Mercurials, which are of such great Benefit in other cutaneous Disorders, properly and seasonably taken, may either prove Antidotes to the Small-pox, or make them more favour-

able when they do happen; and that especially as they are destructive to Worms, with which Children are so often troubled, and frequently create terrible Disasters when the variolous Fever coincides with them.

But I am really doubtful that Mercurials will too much dissolve the Blood of some Persons, and dispose to fatal Hæmorrhages—But that may be easily prevented by giving the *Peruvian Bark*, or something of that Nature, at the same Time.

(C) This Year may be justly reckoned amongst the most rainy, at least for the Frequency of the Rain, if not the Quantity; for it was almost continual, although not very heavy. Vehement Showers make the Air dry by carrying down the Vapours, that were heaped up in the Atmosphere; and hence, in Event, we commonly see the Air very pure and clear after them; and the Hygrosopes indicate a much greater Degree of Dryness in it; whereas a thick misting Rain renders every Thing very moist and wet.

Indeed I scarce ever remember the Atmosphere to have been so moist and thick as in this, and the preceding Year—The Winter was too warm, the Summer very cold, both very unseasonable, melancholy and rainy; such truly as generally abound with Diseases—It is certain since we have had such moist Seasons
putrid,

putrid, slow, nervous Fevers, and Intermittents of all Kinds, are become very plenty in this Country, nay in this Town, and the Neighbourhood, whereas, about twenty Years ago, an intermittent Fever was scarce ever seen here; nay I well remember very many of the Invalid-Soldiers, brought to this Garrison from the Coasts of *Suffolk* and *Portsmouth*, almost quite destroyed by obstinate quartan Agues, who were presently recovered here by the mere Wholesomeness of the Air.






OF THE CONSTITUTION

OF THE
AIR, and EPIDEMIC DISEASES,
In the YEAR 1736.

JANUARY.

 HIS Year begins with a melancholy Aspect, for the gloomy South-Wind blows, and perpetual Rains fall; indeed there were very few fair Days during the whole Month: The Atmosphere was excessively moist and thick, and towards the End cold: Frost very seldom; Floods often.

Rain $\frac{1}{1}$. $\frac{1}{2}$. $\frac{1}{3}$. 4. 6. 8— $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{12}$ — $\frac{1}{14}$
— $\frac{1}{16}$ — $\frac{1}{18}$. $\frac{1}{19}$. 21— $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{25}$ — $\frac{1}{28}$. $\frac{1}{30}$.
Dig. Dec.
31 = 5.070.

Hail

Hail the 2d, 13th, 20th, and 26th. Thunder and Lightning with most heavy Rain the 16th at Even.

Frost the 16th, N N W 1—the 22d, N N W 1—A Storm the 25th at Even. S S W.

Greatest Height of ☽	6. 29.8. W N W 2.	} Mean Alt.
Least	25. 28.7. S S W 4.	
Coldest Day 22. 66. N N W 1.		
Warmest	4. 50. S b W 2.	} Mean Alt. 56 $\frac{1}{2}$.

Many are plagued with Coughs and Swellings of the Throat and Parotids—Apoplexies and Paraplegia up and down—The Itch and pustular Eruptions frequent.

F E B R U A R Y,

Although the Weather was very stormy at the Begining of *February*, a clear Sky and a sharp Frost soon succeeded, the Wind blowing from the North, which greatly dried the Atmosphere, and often bound up every Thing in Frost—In the Begining of the Month great Inundations: Afterwards Snow and Hail sufficient.

Rain $\frac{1}{11}$ 1. $\frac{1}{11}$ 2. $\frac{1}{11}$ 3. 5. $\frac{1}{11}$ 7. $\frac{1}{11}$ 8. 9. 14. 26—Snow the 16th and 17th N N W 1—the 19th E S E 1—the 20th E 3—the 23d N N W 3—the 24th N N W 1—Hail the 2d W N W 2—the 19th 21st, 24th—the 26th E S E 2—the 28th

Dig. Dec.
N N W 1 — = 3.082.

N 3

Small

Small *AB.* the 7th E S E 1—the 19th E b S 1; a great *AB.* the 6th H. 8. p. m. n 1. whose bright vibrating Rays were shot from the very South, and their lucid Coröna, or Center, was more to the East than I had ever seen before.

There was a great Tide here the 16th, N N W 3, but in no Dègrée so overflowing as at *London*, the Coasts of *Kent*, *Suffolk*, &c. and the opposite Shöres of *Holland*, &c. where it was exceeding great.

Greatest Height of	8	29. 30.0.	N b E 2.	} Mean Alt.
Least	22. 28.5.	W S W 2.	29.3½.	
Cooldest Day	13. 7½.	N N E 1.	} Mean Alt. 60½.	
Warmest —	2. 56.	W N W 2.		

Very many Coughs and Catarrhs with a slight feverish Disorder oftentimes; Squinzies, Pleurifies, and Peripneumonies are not uncommon. Abundance of the younger Sort of People are greatly troubled with Chill-Blains, and Kibed-Heels.

M A R C H.

A cold Season till the 10th of the Month, but afterwards much warmer: The East-Wind blew very frequently, and very often it was very fine, fair Weather, and the Air was pure and dry.

Rain 1. 6—8. ¹¹ 11. 19. ¹¹¹¹ 21—23. 27. ¹¹ 29.

Dig. Dec.

Snow the 3d E 3—the 8th N W 1 = 2.138.

Greatest

Greatest Height of ☿	1. 30.0. E b N 1.	} Mean Alt.
Least	22. 28.8. S S E 2.	
Coldest Day	7. 66. N W 1. A severe black and very great Hoar Frost.	} Mean Alt.
Warmest	— 27. 45. S S E 2.	

Most troublesome ulcerated Chill-Blains frequent: Peripneumonies common, mostly of the bastard Kind.

A P R I L.

An East-Wind blew often in *April*, sometimes a North-East, frequently a North-West-Wind, which raised the Barometer, which had been a long Time depressed, and scattered the Clouds; however, from the 15th to the 25th, there was frequent Rain.

Rain 1. $\frac{1}{15}$ — $\frac{11}{18}$ — $\frac{1}{21}$. 22. $\frac{11}{25}$. Hail the
Dig. Dec.
15th = 1.340.

Very great Hoar-Frosts the 11th and 12th.
Very great Dews at the Close.

Greatest Height of ☿	3. 30.1. E 1.	} Mean Alt.
Least	25. 29.3. W S W 1.	
The coldest Day	11. 58. N 1.	} Mean Alt.
Warmest	— 29. 32. a Calm.	

Pleurisies and Peripneumonies frequent,
Squinzies and Ophthalmies up and down.

M A Y.

A steady East-Wind blew for the most Part during this Month, and often very briskly,

N 4

which

which sunk the Baroscope, a North, or a North-West Wind however frequently inter-curred--At the Beginning of the Month the Air, for the Season of the Year, was not a little cold; but afterwards it was often warm and thin.

Rain $\frac{''' }{2}$. 4. $\frac{'' }{5}$. 9. 11. $\frac{''' }{12}$. 15. 16. $\frac{''' }{22}$. 23.

$\frac{2}{27}$ Dig. Dec.

$= 2.536$.

A violent Wind the 21st p. m. E S E—A great Halo round the Moon the 9th H. 10. p. m. E 2—A very great fiery Kind of Halo the 11th H. 10. p. m. S E 3.

Greatest Height of	§ 19	29.8.	E S E 2.	} Mean Altitude
Least	12.	29.1.	S E 3.	
Coldest Day	3.	52.	N N W 1. uncommon	} Mean Alt.
			Cold.	
Warmest	—31.	27.	N N W 1.	39 $\frac{1}{2}$ °.

Pleurisies and Peripneumonies here and there; an Eruption of red itching Pustules is troublesome to several: A dangerous baleful Season for consumptive People.

J U N E.

In the Beginning of *June*, the Atmosphere was very thick and moist, afterwards thin, and often very hot, almost to the End of the Month, very great Dews falling—The Wind in the mean Time was very variable; it was often East, sometimes North-East, and frequently North-

North-West ; a South-West Wind at the Beginning.

Rain $\frac{1}{3}$. 4. 6. $\frac{1}{13}$. 14. 23. $\frac{11}{27}$. $\frac{1}{29}$. $\frac{111}{30}$ =
Dig. Dec.
1.614.

Thunder and Lightning the 29th at Night
S E 2—at a Distance the 23d—the 28th p. m.

Greatest Height of ☿ 18. 29.9. N N E 1. } Mean Alt.
Least ————— 27. 29.3. E S E 2. } 29.6 $\frac{3}{8}$.
Coldest Day 6. 38. W N W 1. }
Warmest — 11. 20. N N E 1 $\frac{1}{2}$. } Mean Alt. 26 $\frac{6}{8}$.

Tertian, semi-tertian, and quotidian Agues
up and down, Inflammations of the Eyes com-
mon—Consumptive Persons' melt down apace ;
some Pleurifies and Peripneumonies at the Be-
ginning of the Month—Abundance labour with
scabby Eruptions—An Infinity of Dun-Flies
infest the Cattle grievously.

J U L Y.

The Wind was various this Month, a Calm
often ; a North-West Wind however for the
most Part near the End with a clear Sky and
very hot Weather, and immense Dews. A
vast Quantity of Rain fell the 2d and 8th, the
Wind South-East ; on the 10th, the Wind
being the same Way, more than ever I knew
almost in the same Space of Time, for, from
3 in the Afternoon of the 10th to 5 the next
Morning, a Quantity of Rain fell equal to
Dig. Dec.

1.686.

Rain

Rain 1. $\frac{''''}{4}$ 2. $\frac{''''}{4}$ 3. $\frac{''''}{4}$ 8. $\frac{''''}{4}$ 10—12—14. $\frac{''}{2}$ 19. 25.
 Dig. Dec.
 28 = 4.870.

A Storm the 2d at Night S E, Lightning at Night the 13th.

Greatest Height of $\frac{''}{4}$ 16. 29.9. a Calm. } Mean Altit.
 Least ————— 11. 29.1. S S E 2^x. } 29.5 $\frac{9}{11}$.
 Coldest Day 4. 40. N 2.
 Warmest — 29. 18. W N W 1. } Mean Alt. 27 $\frac{10}{11}$.

Intermittent Fevers, and some miliary of a very bad Kind, but mostly in the Country— The Small-Pox scattered up and down here— The Cholera, Diarrhœa, and Dysentery also are very frequent every-where.

AUGUST.

At the Begining of *August* the Air was thick and very hot, in the Middle of the Month cooler, a North-West Wind blowing—In the mean Time the Wind was very inconstant; near the End very much Dew fell, and the Heats returned.

Rain 1. $\frac{''}{4}$ 6. 7. 8. $\frac{''}{2}$ — $\frac{''}{2}$ 14. $\frac{''}{2}$ 15. 17. $\frac{''}{2}$ 26.
 Dig. Dec.
 28. 31 = 1.834.

A very stormy Night the 13th, S W b W 4. Lightning the 20th at Night: Great Tides the 26th and 27th, S S E 2^x. AB. the 29th N 1.

On the 25th W 1, between the 9th and 11th P.

p. m. there was a narrow Kind of Arch, or Zone, like a Rain-Bow as it were, and very lucid, stretched from the western Horizon to the very East, which much alarmed the Multitude.

Greatest Height of ☿	18. 29.8. N W b N 1.	} Mean Alt.
Least	26. 29.1. S S W 2.	
Coldest Day	16. 42. W N W 1.	} Mean Alt. 27 $\frac{7}{10}$.
Warmest	3. 19. W S W 1.	

Miliary and malignant Fevers are common ; Vomiting, Purging, and sometimes even bloody Dysenteries, are exceeding frequent.

The Bees thrive well and make Abundance of Honey ; a vast many Grass-Hoppers and Dun-Flies : Excellent Corn every-where.

S E P T E M B E R.

A North-West Wind blew the greatest Part of this Month ; at the Begining, and towards the End, Rain : The Baroscope was commonly high : The Air generally thick.

Rain	1.	3.	4.	6.	8.	10.	13.	15.	22—24

Dig. Dec.

—26—29 = 1.512.

Small northern Lights, the 26th and 27th H. 9. p. m. N W 1. A very great Halo about the Moon the 12th H. 11.

Greatest Height of ☿	21. 30.0. N N E 1.	} Mean Alt.
Least	30. 29.3. S W b S 3.	
Coldest Day	18. 50. a very great Hoar-Frost, N N W 1.	} Mean Alt.
Warmest	7. 29. S W 1	

The

The Cholera, Diarrhœa, and Dysentery still very common, a Fever sometimes accompanying.

Many miliary, scarlet, and pustular Fevers, some slow and nervous often with Tumours of the Fauces and parotid Glands, and profuse Sweats always; especially in the southern Parts of *Devon* and *Cornwall*.

OCTOBER.

At the Coming in, and Going out of *October*, an immense Quantity of Rain fell, the South-west Wind in the mean Time blowing vehemently: But, from the 12th to the 21st, not a Drop of Rain, an East or North-North-East Wind blowing: At the End of the Month the Air was thick and humid.

Rain $\frac{''' }{1}$ — $\frac{'}{3}$. 6. $\frac{''}{7}$ — $\frac{''}{9}$. $\frac{''' }{10}$. $\frac{''' }{11}$. 22. $\frac{''}{23}$ —
 $\frac{''}{26}$. $\frac{'}{27}$. $\frac{''' }{29}$. $\frac{''}{30}$. $\frac{''' }{31}$ = 6.534. Dig. Dec.

A Storm the 1st in the Morning early S b W—the 7th S W—the 9th in the Morning S W by W 4^s, from 1 p. m. of the 9th to 3 p. m. a most vehement North-west Wind raged like the Arcius Gallicus, that overturns every Thing in its Way, and the Mercury fell exceeding quick—A very great yellowish Halo round the Moon the 6th H. 8. p. m. W. 1. AB. the 27th H. 8. W N W 3, but in the Middle of the Night violent Hail and Lightning.

Greatest Height of ☿ 21. 30. 1. N N E 1. } Mean Altitude
 Least ————— 9. 28. 4. N W 4^s. } 29. 4 $\frac{1}{2}$.
 Coldest Day 21. 54. N N E 1. }
 Warmest —16. 36. E S E 1. } Mean Alt. 42 $\frac{1}{2}$.

Not

Not a few slow nervous and miliary Fevers with profuse Sweats ; Purging, Vomiting, and Dysenteries still here and there, especially at the Begining of the Month—At the Close, Hooping Coughs amongst Children. The Murrain and a Kind of pestilent Disease destroys the Cattle, and Hogs greatly, in the South of *Devonshire*.

N O V E M B E R.

The Quicksilver in the Baroscope kept for the most Part a high Station this Month, the Wind often from the East, often from the North : The Air was commonly very moist, and frequently cold—Ice at the Begining ; Frost at the End, and very great Hoar-Frosts.

Rain 1. 6. $\frac{1}{7}$. 9. 11. 12. 16. 18. 21. $\frac{24}{25}$.

$\frac{1}{25}$. Dig. Dec.
25. 28 = 1.150.

A Storm in the Evening the 24th S W b W, and much Hail almost the whole Night the 7th.

Small AB. the 7th N E 1—A greater the 8th H. 10. N N E 1—A great variegated one the 13th H. 7. N W 1.

Greatest Height of ☿	5. 30.3. E N E 1. }	Mean Alt.
Least	—25. 28.8. W 2. }	29.8 $\frac{2}{3}$.
Coldest Day	27. 65. E N E 1. }	Mean Alt. 58 $\frac{2}{3}$.
Warmest	—22. 44. W N W 1. }	

Dysenteries as yet ; convulsive Coughs up and down : A vast Number of People are seized

seized with a Cough, Catarrh, and Tumours of the Neck and Face; not a few with Squin-zies, several are tormented with the Rheumatism.

D E C E M B E R.

The Barometer still keeps a high Station, although in the Middle of *December* a furious South-West Wind sunk it considerably, and brought in very much Rain, making the Atmosphere exceeding moist—Indeed from the End of *October* to this very Time the Air hath abounded with an immense Quantity of Vapours, which partly sustained the Mercury as high as it was—The North-Wind sometimes produced Frost, and that indeed, towards the End of the Month, very hard.

Rain	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	10—13.	$\frac{1}{14}$	$\frac{1}{15}$	$\frac{1}{17}$	
	2.	3.	4.	5.					
									Dig. Deg.
	$\frac{1}{18}$	$\frac{1}{20}$	$\frac{1}{22}$	$\frac{1}{25}$	$\frac{1}{27}$	$\frac{1}{28}$	31		= 5.026.

Thunder, Lightning, and vehement Hail the 6th, early in the Morning W N W $\frac{1}{4}$. A Storm the 17th at Night W S W—the 20th betimes in the Morning S W b W.

Greatest Height of ☉ 24. 30.4. N 1.	}	Mean Altit.
Least 20. 29.1. S W b W 4.		29.7 $\frac{1}{2}$ $\frac{9}{10}$.
Coldest Day 25. 70. N 1.	}	Mean Alt. 55 $\frac{20}{100}$.
Warmest —14. 48. S W 3.		

The Diarrhœa and Dysentery still; Rheumatism and Jaundice frequent: Great Complaints
of

of Lowness of Spirits every-where—Tumours of the Fauces, and of the parotid and maxillary Glands, Coughs, Catarrhs, Stoppage in the Head, Hoarseness are complained of by every one every-where, a slight Fever sometimes accompanying: Many even in the same House are seized thus at one and the same Time—But these Symptoms very easily vanished, provided they would keep themselves in Bed a little, and promote Sweats by drinking freely of warm Liquor.

The whole Quantity of Rain this Year was
Dig. Dec.
= 36.706.





OF THE
 CONSTITUTION
 OF THE
 AIR, and EPIDEMIC DISEASES,
 In the YEAR 1737.

JANUARY.

THE Atmosphere is still loaded with
 a vast Quantity of Vapours, and
 keeps up the Baroscope to a very
 high Station, a North-West Wind
 for the most Part : In the mean Time the Air
 is altogether as moist as if the most rainy
 southerly Wind had blown ; indced a South-
 West Wind blew in the Middle of the Month,
 but continued but a little while — From the
 21st to the 25th, Frost.

Rain 2. 7. 12—14. $\frac{1}{16}$. $\frac{11}{17}$. 26. 27. 29.
 $\frac{1}{30}$. Snow the 24th. Hail $\frac{1}{28}$ = 1.588. Dig. Dec.
 A great

A great Halo round the Moon every Night from the 27th to the End.

Greatest Height of ☽	19. 36.6. N 1.	} Mean Alt. 30.176.
Least	17. 29.6. S W 2.	
Coldest Day 25.	70. a Calm.	} Mean Altitude 55.36.
Warmest — 1.	48. W. 1.	

The catarrhal Fever infests an immense Number of Persons, as in the preceding Month; and now also a vast many Horses seem to labour under the very same Disorder nearly, of which many die—Pleurisies and Peripneumonies also rage pretty much, especially the bastard Kind: The Jaundice is not uncommon.

F E B R U A R Y.

The westerly Wind prevailed this Month, bending often to the North, more frequently to the South: Sometimes a N N E Wind intervened, sometimes a South-East: The Air continued moist, but the Barometer sunk.

Rain $\frac{''' }{1.}$ $\frac{'' }{3.}$ $\frac{''' }{6.}$ 8. 11. $\frac{'' }{13.}$ 14. $\frac{'}{15.}$ $\frac{''' }{16.}$ 17.

$\frac{'' }{18.}$ 19. $\frac{'' }{21.}$ $\frac{'}{24.}$ —Hail 25. 26 = $\frac{\text{Dig. Dec.}}{3.488.}$

Very great Hoar-Frost and Ice the 5th, 6th, 8th, and 9th—A Storm with Thunder and Lightning the 17th at Night W b N. A very great Halo round the Moon the 27th and 28th.

Greatest Height of ☽	9. 30.2. N b E 1.	} Mean Altitude
Least	16. 29.2. S W 3 ^x .	
Coldest Day	2. 66. N 1.	} Mean Altitude 55 ³ / ₇ .
Warmest	— 23. 49. S W b W 2.	

Many labour under the Rheumatism and the Squinzey; very many still under the catarrhal and pulmonic Disorder: The Small-Pox are scattered up and down here, in many Places they are epidemic—The Strangles and suffocating Cough still amongst the Horses.

M A R C H.

An East, or North-East Wind, blew at the Beginning and End of *March*, a North-West for the most Part in the Middle: The Air became more thin and dry, especially towards the End, for the Vapours were much fallen.

Rain	^{'''} 7.	['] 8.	['] 10.	11.	^{''} 13.	^{''} 14.	15.	['] 16—	^{''} 18.
	^{'''} 19.	['] 20.	^{''} 21.	^{''} 22.	^{'''} 30.	31	= 4.328.		
							Dig. Dec.		

Small northern Lights the 7th, W N W 1
—the 18th, N W b W 3—A Storm the 18th
a. m. S 4_x.

Greatest Height of ☽	6. 30.1. N N E 1.	} Mean Alt.
Least	14. 28.8. W b N 3 ^x .	
Coldest Day	6. 64. Hard Frost.	} Mean Altit. 52 ³ / ₇ .
Warmest	— 31. 46. S E 1.—	

Pleurifies and Peripneumonies, both true and spurious, are not uncommon: Rheumatisms, long and severe Sciatica, and torment-
ing

ing Gout, afflict many People. Very many Coughs with Pain of the Throat at the End of the Month.

A P R I L.

From the Beginning of the Month to the 18th, a fresh Wind from the Eastward; from the 20th, a South-West, or North-West Wind—At the Beginning of *April* the Air was very cold, in the Middle very dry, but from thence warm.

Rain $\frac{''' }{1}$. $\frac{'' }{2}$. 4. $\frac{'}{8}$. 9. $\frac{'}{19}$. $\frac{''' }{21}$. $\frac{'' }{22}$. $\frac{'' }{23}$. $\frac{'}{26}$.

Dig. Dec.

28. Much Hail 24 = 3.058.

A Storm the 2d E S E 4—the 13th the whole Day E 4^r.

Greatest Height of ☿	12. 30.0. NE 1 ^r .	} Mean Alt.
Least	23. 29.0. SSE 3.	
Coldest Day	6. 58. E 1.	
Warmest	30. 32. E 2.	} Mean Alt. 43 $\frac{1}{2}$.

Many are seized with Apoplexies, Palsies, and Giddiness of the Head, some with Pleurisy and Peripneumonies; the Small-Pox here and there—The Asthma was very common, especially in the Middle of the Month—Coughs, Catarrhs, Tumours of the Neck and Face every-where: Frequent convulsive Coughs amongst Children, in the southern Parts of *Devonshire*.

M A Y.

The returning easterly Wind blew almost throughout the whole Month, bending often to the South, but more and oftener to the North : The Weather in the Beginning, a Day or two excepted, was warm enough, but a most fervid Season came on afterwards—Vast Dews greatly cherished the Fields and Gardens during the extreme hot Weather, otherwise every Thing almost would have been burnt up.

Dig. Dec.

Rain 8. $\frac{1}{9}$. 13. 15. 27 = 0.332.

Thunder and Lightning here the 27th, p. m. S W b W 2—Thunder and Lightning to the Northward, near the *Dartmoor-Mountains* and in the western Part of *Cornwall*, with most violent Rain the 24th, 25th, and 26th, but there was none here.

Greatest Height of ☽	16. 30.0. N E 1.	} Mean Altitude
Least	22. 29.2. E S E 2.	
Coldest Day	10. 52. N 2. uncommon Cold !	} Mean Alti.
Warmest	25. 15. a Calm--uncommon Heat.	

Compound miliary Fevers, (*viz.* such in which the red Rash is mixed with white, or limpid, Pustules) are up and down here, but very frequent in the western Parts of *Cornwall*. —In the Beginning of the Month many were seized with Disorders of the Head and Breast : Many labour under profuse Hæmorrhages, the Cause of which was undoubtedly owing to the

the vast Change of the Temper of the Air ; for in the Middle of the Month we shivered with Cold, at the End we burnt with Heat.

J U N E.

A frequent northerly Wind made the former Part of the Month dry indeed, but very cold ; the latter Part however was hot, a North-West Wind blowing. The Air through the whole Month was very thin, but very frequent and very great Dews fall : For the Earth, greatly heated by the Sun, sends up a vast Quantity of Vapours, which, being condensed by the Cold of the Night, fall in gratefully refreshing Dews on the Plants and Grass, unless a brisk Wind scatters and carries them away with it ; therefore when there is little or no Wind we see the greatest Dews, which a strong Wind would carry off ; though the Earth notwithstanding might exhale an equal Quantity of Vapour.

Rain $\frac{1}{4}$. $\frac{1}{5}$. $\frac{1}{14}$. $\frac{1}{17}$. $\frac{1}{18}$. 23. 25 = 1.066. Dig. Dec.
Thunder a. m. the 25th, N W 1.

Greatest Height of	8	30.0.	N 1.	} Mean Alt.
Least	5.	29.2.	E N E 1.	
Coldest Day	15.	42.	N N W 1.	} Mean Alt. 27 $\frac{1}{2}$.
Warmest	— 22.	19.	a Calm.	

At the Entrance of the Month many Rheumatic and Catarrhs, Fluxes of the Belly very
O 3 common

common: Many convulsive Coughs amongst Children: The Small-pox in the Neighbourhood, but none here.

JULY.

A sultry *July* follows, but Winds from the South often, and from the West, bring much Vapour into our Atmosphere, especially towards the End of the Month. An immense Quantity of Dew fell in the Beginning — An infinite Number of Flies plague People everywhere, and the Caterpillars almost eat up all our Herbs.

Rain 8. 13. 14. 18. ^{///}19. [/]20. [/]22. 23. 25.
Dig. Dec.
28—31 = 1.320.

Thunder at a Distance the 7th and 11th. A
Storm the 22d S W b S 4.

Greatest Height of ☿ 4. 29.7. S E 1. } Mean Altit.
 Least ————— 22. 29.0. S W b S 4. } 29.4.
 Coldest Day 31. 36. N W b W 1. }
 Warmest — 7. 17. W S W 1. } Mean Altitude 25 $\frac{1}{3}$ °.

Miliary Fevers, chiefly of the red Kind; Peripneumonies and colical Disorders up and down: Convulsive Hooping-coughs torment a vast many Children in the southern Parts of *Devonshire*; Ophthalmies common, and so are Vomitings with Purging.

AUGUST.

At the Coming in and Going out of this
Month

Month the Wind was for the most Part between the West and the North; a south-west Wind however frequently blew in the Middle of *August*; and the Atmosphere was rendered much more thick and moist, and much colder withal.

	<u>'''</u>	<u>'''</u>		<u>''</u>				<u>''</u>
Rain	1.	2.	3.	5.	6.	7.	10.	13.
								15.
								19.
	<u>''</u>	<u>'</u>	<u>''</u>					
	20.	21.	23.	25.	26	=	3.848.	

Dig. Dec.

A great Storm in the Morning the 20th S W b S 4^x — *AB.* the 9th, H. 10. p. m. N W b W 1. A very great one the 10th, H. 9. N W 1. This was most beautifully tinged with various and very vivid Colours, its most shining fiery Corona declined a little to the South of the Zenith, and was about 12 Degrees to the Eastward of it.—A very great *AB.* the 11th, 10. p. m. N W b N 1, its Corona of the Colour of red-hot Iron was exactly in the same Place of that above-mentioned—A small *AB.* the 12th, H. 9. W N W 1.

Greatest Height of ☉	9. 29.9.	N W 1.	} Mean Altitude
Least	20. 28.8.	S W b S 4 ^x .	
Coldest Day	4. 44.	NN.W 1.	} Mean Altitude 33.25.
Warmest —	17. 27.	S S W 2.	

Coughs, and also Purging and Vomiting, very frequent: Slow nervous Fevers, and some of the miliary Kind, up and down: The Small-Pox here and there.

S E P T E M B E R.

The Barometer was low all this Month ; a south-east, or south-west Wind commonly blowing ; the Air in the mean Time became very moist and cold, for we had now and then also a North-Wind.

Rain 2. $\frac{''' }{11}$ — $\frac{' }{15}$. 18. $\frac{'' }{19}$. $\frac{'' }{20}$ — $\frac{''' }{22}$ — 24.
 26. $\frac{' }{27}$. 28 — $\frac{' }{30}$ = 2.826. Dig. Dec.

A Storm the 11th S E b S 4_x — the 22d S W 4 ; Thunder and Lightning the 20th, 2. m. a very great Halo round the Moon the 27th S b W 1^r.

Greatest Height of	8	10.	29.9.	NNE	1.	} Mean Altitude
Least	$\frac{22. 28.5.}{29.3\frac{1}{2}\frac{8}{7}}$					
Coldest Day	30.	46.	NNW	1.	} Mean Altitude	36 $\frac{8}{29}$.
Warmest —	6.	28.	ESE	1.		

Many labour under Fluxes of the Belly, some irregular Intermittents, many under colical Disorders, and even a Cholera ; Tumours of the Fauces and Parotids, and Catarrhs with a Cough, are very frequent ; the Small-Pox up and down ; nor is the Jaundice, and Rheumatism, uncommon.

O C T O B E R.

A frequent easterly Wind during this Month rose the Barometer often, which bending also often to the North made the Season a little colder ;

colder; we had however now and then a fair warm Day intervening, but the Air was for the most Part moist and thick.

Rain $\frac{''}{1.}$ $\frac{'}{5.}$ $\frac{'}{8.}$ $\frac{''}{9.}$ $\frac{''}{11.}$ $\frac{''}{15.}$ $\frac{'}{18.}$ 24. 30 =
Dig. Dec.
1.556.

A Storm the 15th at Night S W 4: Ice and a very great Hoar-Frost the 14th and 15th N N E 1. — On the 20th 7. p. m. I observed a very vivid lunar Rainbow, a very thick Mist, or exceeding small Rain, then falling.

Greatest Height of	8	14.	30.1.	N N E 1.	} Mean Altitude
Least	————	16.	29.0.	W b S 2.	
Coldest Day	22.	61.	N E 2 ^x .	} Mean Altitude	29.6 $\frac{2}{3}$.
Warmest	—	3.	43.		N b E 1.

The Jaundice is frequent, the Small-pox are up and down, Pains of the Teeth and Swellings of the Throat and Face, often accompanied with rheumatic Pains, especially in the Loins, afflict very many Persons.

N O V E M B E R.

Now a north-east, and then a north-west Wind, still sustain the Mercury in the Barometer, especially in the former Part of *November*; however they did not at all render the Air dry; — indeed about the Middle of the Month we had frequently a moist southerly Wind.

Rain

Rain $\frac{''}{12} - \frac{'}{14} - 17. \frac{'}{19.} \frac{'}{23} - 25. 26. 28 =$
 Dig. Dec.
 1.334.

AB. the 1st 10. p. m. E N E 1 — the 7th
 N W b N 1. A vehement Wind the 27th in the
 Afternoon N W b W.

Greatest Height of	8	4. 30.4.	E N E 1.	} Mean Altitude
Least	16. 29.1. W 1.			
Coldest Day	30. 65.	N E 1 ^x .	} Mean Altitude	29.8 $\frac{1}{2}$.
Warmest	— 12. 48.	S b W 2.		53 $\frac{6}{10}$.

This Month an epidemic Disease raged every-where, in this Town particularly in the Middle of *November* : It seized on every one almost of whatever Constitution, or Age, much in the same Manner as the epidemic, catarrhal Fever did in the Year 1733, but in a much severer Degree.

There was a great Stoppage, Heaviness and Pain of the Head, frequent Sickness at Stomach, perpetual Sneezings, exceeding great Defluxions from the Head, Nose, &c. and almost always a very importunate Cough.—A terrible Pain of the Back and Loins racked many at the Beginning, which was for the most Part of ill Omen ; for at the same Time a great Oppression in the Præcordia and no small Degree of Fever were urgent, often indeed quite peripneumonic, but they spit very thin Matter, seldom any Thing concocted : Persons under such Circumstances were utterly lost if a
 Phrenzy

Phrenzy also came on.—There was often such a vast Defluxion on the Fauces, that it produced a pretty great Squinzey, however more frequently a Tumor of the Face, parotid and maxillary Glands followed, and an immense Distillation of acrid Rheum from the Mouth and Nostrils—A most acute Pain of the Teeth tormented very many, even such as had very sound Teeth before; and that too very often only on one Side terminating most accurately between the Dentes incisores; and often also one Side of the Head only was affected, as in a most exquisite Hemicrania.

Far the greater Part laboured only under a slight Fever with an obstinate Stoppage in the Head and Catarrh with most vexatious Pains of the Teeth, and a Tumor, and Kind of Soreness of the Fauces; younger Persons however in the Advance of the Disease commonly grew delirious: Very many were afflicted with severe wandering rheumatic Pains, and some with a vehement Sciatica, often very obstinate; many with griping Pains of the Abdomen, which often ended in a critical Diarrhœa. The Tongue was most commonly white, seldom dry, nor did the Sick thirst much; the Urine was generally turbid and reddish:—The Blood often sily like that of Pleuritics.

This catarrhal Fever hath raged more or less for several Winters past, but it put on various

various Shapes according to the different Constitutions of Persons — only a slight feverish Habit held some, which went soon off by a moderate Sweat; not a few however were seized with severe peripneumonic Symptoms: In general it was much more severe this Year than usual, and required larger Bleeding.

This Disease seems to me to be altogether dependant on a thick, moist, cold Atmosphere, which shuts up the Pores of the Skin, and heaps up a Quantity of acrid Serosities within the Body, for a very thick and humid Constitution of the Air always precedes and accompanies this Distemper, nor doth it ever reign much but in the Winter Months, and seems to be nearly of the same Nature with that *Sydenham* calls the *Febris Hyemalis*.

D E C E M B E R.

The Temper of the Air was very various this Month, now very cold, the North-Wind blowing, now much warmer, the south-west Wind often blustering, and sometimes the south-east: An immense Quantity of Vapours diffused through the Atmosphere hath kept up the Barometer in a wonderful Manner, though not a little Rain hath fallen.

Rain	$\frac{''}{2.}$	4—	$\frac{''}{6.}$	$\frac{'''}{8.}$	$\frac{''}{12.}$	14—	16.	18—	20.
$\frac{'}{22.}$	$\frac{''}{23.}$	$\frac{'''}{24.}$	$\frac{'}{26.}$	$\frac{'}{30.}$	Dig. Dec.				
					= 2.620.				

Hail

Hail the 31st. A Storm the 18th S S E 4
—the 30th S S W 4. Very great Hoar-Frosts
often.

Greatest Height of ☿	4. 30.3.	N N E 1.	} Mean Altitude
Least	8. 29.3.	S W 3x.	
Coldest Day	29. 73.	N E 1.	} Mean Altitude 57 $\frac{9}{11}$.
Warmest —	24. 49.	S W 2.	

In the Begining of the Evening of the 5th of this Month the whole Sky, as if it had been covered with a very thin Cloud, grew exceeding red as if from the Reflexion of the Light of a great Bonfire; the Light indeed was as great as if it had been from that of a Full-Moon, when the Heaven had been quite overspread with Clouds — This wonderful Phænomenon continued almost till Midnight, but its greatest Splendor was between Five and Seven in the Evening — It really greatly affrighted the Populace, some thinking Towns, or Villages, on Fire; others deprecating the Judgments, that this bloody Sky, as they called it, might portend. — The Air had been for the whole Day almost foggy and warm, and a Kind of thin Mist had fallen, especially in the Afternoon: There was scarce any Wind. In the Evening the Fog smelt offensive; and, as I happened at that Time to be riding through a Coppice, I was sprinkled with the Drops from the Bushes, which tasted of a maukish, disagreeable Sweetness.

This

This unusual Light was seen far and near in the Northern Parts of *Europe*; but at *Kilkenny* in *Ireland* was seen a Kind of Globe of Fire suspended in the Air, this same Evening, for near an Hour, and then it burst with a terrible Noise, and scattered Flames all around it.

As to the Cure of this epidemic Disease, I did not much depart from the Method I had used in that of 1733 above described; in this however Bleeding was more necessary, and the Repetition of it was sometimes beneficial, especially if the Fever was very urgent, and the Pain of the Back and Breast severe——But he is certainly greatly mistaken, who orders Bleeding with as free a Hand in such Kind of Disorders, arising from an acrimonious Pituita, as in a true Pleurisy, or Peripneumony: This the most candid Dr. *Sydenham*, in other Cases not very sparing of Blood, hath noted, Sect. v. Cap. 5; which I would have the Reader consult.

After Bleeding I ordered several Blisters to be laid on, from whence an astonishing Quantity of Humour was discharged.

Nothing proved of more Benefit in this Disease than a kindly warm Sweat, equally diffused over all the Body; and nothing promoted it more safely than thin, dilute Wine-Whey, or a slight Decoction of Eryngo-Root, or something of this Kind, drank warm. I

gave

gave also frequently with very great Success a Mixture of Salt of Harts-Horn saturated with Juice of Lemon, with Mint, or Hyssop-Water; these Things very readily promoted Sweat, but if not Urine at least; besides they always keep the Belly somewhat open, and effectually threw off the pituitous Colluvies, and rendered the Breathing more free, especially with the Addition of Oxymel of Squills.—*Le Mort's* Elixir Asthmaticum most effectually quieted the Violence of the Cough, and also promoted Sweats—The Intestines were not only to be kept somewhat lax through the whole Course of the Disease, but to be purged likewise at the End of it; lest the Relics of the Fever should bring on greater Evils.

After the Fever was quite carried off most obstinate Rheumatic Pains often remained, which indeed Mercurial Cathartics pretty well purged off: But I found nothing more effectual in them than the following Preparation of Antimony, which indeed contains the whole Power of that Mineral, and therefore (begging Pardon for the Term) I call it the Essence of Antimony.

I laboured formerly with all my Power and Diligence to get some useful Medicine from Antimony; I tried almost all the Processes of the Chemists and Alchymists not only as to the Preparations, but likewise by exhibiting them

to various Patients; many indeed I know to be of wonderful Efficacy, but I most solemnly affirm I never found any one of them to be better, safer, or more effectual, than the common simple Antimonial Wine, prepared with the Glass of Antimony and a generous dry Wine in which some Aromatic may be infused. — I speak from sufficient Experience, when I assert, that it possesses the whole Powers of Antimony; for taken in a large Dose it powerfully moves Vomiting, in the small Quantity of 20, or 30, Drops only it promotes gentle Sweats, but in a somewhat larger it provokes a Stool, or two: Now what more can any other Preparation of Antimony do? Which, though possessed of such great and various Virtues, contains only the most exceedingly minute Particles of that Mineral, I had almost said its mere Effluvia as it were, which, being amongst the very Minima Naturæ, are capable of passing through and scouring even the very smallest Tubuli of the whole human Frame, and yet potent enough to give a strong Irritation to the great alimentary Canal, and therefore much more surely to affect the small Canaliculi of the Body; but, from the exceeding great Tenuity of these antimonial Particles, they by no Means lacerate the Vessels.

Observe therefore, my good Readers, that I lay here before you a Medicine most easily indeed

indeed to be prepared, but of exceeding great Efficacy ; for in all Kinds of Obstructions of the Vessels it may be very usefully given, even whether you would purge the Primæ Viæ, or the inmost Recesses of the Body : Nothing surely can be more aptly given to promote Sweats, nor any Thing more safe, for it heats very little, whence even in Fevers, especially the slow, and intermittent, it is exceeding useful ; and likewise in very many chronical Disorders, particularly in an obstinate Rheumatism. — I strongly assure you, that this wants no one of the Virtues, which any other Preparation of Antimony hath, notwithstanding it may be puffed off with pompous Advertisements, or prepared in a very operose Manner.

The whole Quantity of Rain that fell in the
 Dig. Dec.
 Year 1737, was = 27.364.

A short Comment on Icteric Disorders.

IN a high Degree of the Jaundice Hæmor-
rhages often burst forth from all Parts of
the Body, as I have frequently seen, and which
could not be restrained by any Kind of Medi-
cines; nay you no sooner stop the Flux in one
Place than it breaks out in another. I had a
very melancholy Instance of this formerly in
a very pious Gentlewoman, who labouring
under a Jaundice, and a feverish Habit of
P Body,

Body, bled violently from the Nose, urinary Passages, Uterus and Intestines, and at length expired in this Manner though I several Times stopped the Hæmorrhage for a short Time; but the more it ceased in the lower Parts the more violently she bled from the Nose.

Many Years ago a robust Gentleman, who drank hard and indulged much in spirituous Liquors, fell into a severe Jaundice, from which however he would have happily escaped, if he would have regularly conformed to the Rules I gave him—But he did not; and because his Gums often bled, and his Teeth were black and foul with the Scurvy, applied himself to a Tooth-Doctor forsooth, who rubbing his Teeth and Gums strongly with Dentifrices and Instruments brought on such an Hæmorrhage from them, that several skilful Surgeons could by no Means stop it, even by applying the most potent Styptics; but spouting forth in innumerable small Streams, as if the capillary Arteries had been cut, from all Parts of the Gums, in the Space of 16 Hours, drained him of almost all his Blood, and absolutely destroyed him.

Indeed there is always no small Danger when a great Hæmorrhage supervenes a Jaundice, for it denotes a most acrid and greatly dissolved State of Blood: In which Case Attenuants, Aloetics, Volatiles and Chalybeates
are

are as bad as Poison, and utterly destructive ; on the contrary Acids, Diluents, and Demulcents, the *Aquæ Acidulæ*, as they are called, and such Sort of Medicines, are of the highest Service. A Decoction of Hemp-Seed out of Milk, or an Emulsion of White-Poppy-Seed and Almonds are often very beneficial, after drawing off a small Quantity of Blood (if there is a feverish Habit of Body and the Pulse will bear it) and gentle Purgatives, as there may be Occasion.—Indeed I think moderate Bleeding in an Hepatitis or Inflammation of the Liver and consequently in Obstructions of the Liver with an inflammatory State of Blood, is almost as necessary as in a Pleurisy, or Peripneumony, for it prevents greater Evils, such as Inflammations, Imposthumations, and Scirrhusities of that Part.

But there is another Species of Jaundice entirely different from the above, which, depending on an inert and viscid State of the Bile, requires a Method of Cure altogether different also ; for in this a too thick and roapy Blood generates a very glutinous and vapid Bile, which at length obstructs the biliary Ducts of the Liver ; so that the Obstruction of the Liver is rather the Effect of the Disease than the Cause.—In this Kind of Jaundice then first of all Emetics, then Cathartics, Aloetics, and Mercurials are wanted ; afterwards saponaceous

aceous Attenuants, Preparations of Tartar, Volatiles, and at length Chalybeates are necessary: Take Care however that you do not exhibit chalybeate Medicines before you have duly attenuated and resolved the Humours, otherwise instead of a Cure you will bring on perhaps an incurable Scirrhus of the Liver.

And here I cannot but very greatly recommend the Tartarum regeneratum, or (as they call it) the Terra Tartari foliata, as a most powerfully dissolvent Medicine, not only in icteric Disorders, but likewise in Abundance of others—For being composed of the most subtile, oleose Acid of Vinegar, and a fixed alkaline Salt, it makes an admirable saponaceous, and most penetrating Medicine, which most readily mixes with all Kinds of Liquors, and is even most readily soluble in highly rectified Spirit of Wine; hence it exceedingly well dissolves Gums, Resins, oily or viscous Substances, whether vegetable or animal; nay Gum Lac, Myrrh, Amber, very tenacious Substances; whence it most potently dissolves the too thick and glutinous Humours of the Body, and very powerfully opens the Obstructions of the Vessels.—And yet, though it is possessed of such great Virtues, it hath scarce any Acrimony; nay it is very remarkable that it may be as safely given to Persons in a Pleurisy, as to those that labour under a Dropsy.—
Medi-

Medicines, which by their mere Weight and Subtility of Parts can attenuate slimy, thick Humours, are of very great Service, but they produce much more happy Effects when assisted by some detergent Kind of saponaceous Substance capable of dissolving fatty and glutinous Obstructions. With due Reverence to the human Fabric, dirty foul Bottles are not as well and easily cleansed by mere Water and Gravel or Small-shot, as they are by adding also some saponaceous Lixivium—If we act rightly, the Use of some Kind of saponaceous Medicine should always precede the Exhibition of such Things as act only by their Weight and Motion, that the glutinous Humours may be thereby incided and rendered fluxile.

This most excellent Salt, or Sapo, lay a long Time concealed amongst the boasted Arcana, and pompous Pretences, of the Alchymists, dignified and disguised with the Titles of Sapo Sapientum, prima materia vegetabilis, Sulphur naturæ vegetabile, Sal harmoniacum vegetabile, mercurius naturæ & Philosophorum; as you may see in *Guido, Lully, Parisinus, &c.*—but the Moderns have called it by the more apposite Names of Acetum radicatum, and Terra Tartari foliata; indeed it is once called Terra foliata by *Lully* in his *Apertorium*—But the Composition of it amongst all consists in

the Mixture and intimate Union of fixed Salt of Tartar with philosophic Spirit of Wine till the Salt is perfectly saturated: But unless you use distilled Vinegar (which indeed is a Kind of mystic Spirit of Wine) you will never make a Salt, that melts at the Fire like Wax, that is dissolvable in rectified Spirit of Wine, and that is foliated and shines like Talc, which yet, amongst these Authors, are its proper Characters.

But why should I seek Diamonds in a Dung-hill? seeing we have in the illustrious *Boerhaave's* Chemistry both the Manner of preparing, and the Virtues of this Salt, most clearly delivered to us: Let me only add that it is much less volatile than is commonly imagined, nay it resists the Fire so long till all the Acid is expelled from it, the fixed alkaline Salt only remaining—But when it is melted by a gentle Fire its Laminæ are more beautiful and splendid, shining as it were like Silver; but I think by this its medicinal Quality is somewhat diminished, as it is by such a Method rendered more alkaline; but this is easily corrected by the Addition of some vegetable Acid.

I have a thousand Times experienced the wonderful and great Effects of this Salt in Obstructions of the Viscera, and a roapy, thick State of the Humours; for I have made a

con-

continual Use of it for near twenty Years ; nor is only this noble Salt useful in these Cases, but even a Lixivium of fixed Salt of Tartar mixed with sharp Vinegar is a powerful Aperient, Detergent, and Solvent : Even the Ancients, as *Pliny* tells us, Lib. xxiii. in Proœm. gave “ *Cineres Sarmentorum ex Aceto ad Vicia Splenis.*” Indeed a Lixivium of Salt of Tartar and Vinegar is much more penetrating than that of Lemon-Juice and Salt of Tartar, on Account of the great Quantity of Mucilage *, that is in Lemon-Juice — But from very sharp Vinegar and volatile Salt of Harts-Horn may be made a Mixture, much more penetrating than either, of very great Efficacy in slow Fevers, obstinate Intermittents, and many other Disorders — And here let me just say that Vinegar poured on volatile animal Salt, that from its empyreumatic Oil is very foetid, then digested and distilled, takes off all the ill Smell from the Salt, nay gives a most grateful Smell to it. This *Roger Bacon*, a Man of immense Erudition, and, for the Age he lived in of astonishing Knowledge, knew very well when he corrected the rancid Spirit of human Hair with Vinegar — It seems as if *Lully* knew it also in the Preparation of his Sal. Harmoniac. Vegetabilis — See his Testament. novissim.

* See of this the following *Treatise de Morbo Colico, &c.*

The Ancients indeed very highly esteemed Vinegar, for *Celsus* says, “*Nam quamvis refrigerandi Vim habet, habet tamen & dissipandi*” * — and therefore *Pliny* † very rightly said, “*Vini Vitium* (to wit Vinegar) *transit in Remedium*”—But of this perhaps enough and even too much.

A Dissertation on Slow Nervous Fevers.

THERE is Mention made of the *lenta Febris* even in *Celsus*, indeed the Appellation *Febris nervosa* is not so classical; but, as modern Physicians very frequently use that Word in that Sense, I have retained it; for as Geometricians, Musicians, and even Grammarians, have Terms of their own, why should not Physicians also? Even *Tully* himself, the great Master of Oratory, gives Leave upon such Occasions. But I am little solicitous about the Word, what I aim at is the Thing; for as this Species of Fever hath been of late much more frequent (with us at least) than any other, I have thought it not improper to say a few Things upon it.

A slow nervous Fever therefore steals on with a slow, but too steady Pace:—They who are seized with it first of all complain of a slight, wandering Chilness, a transient, erratic

* Lib. v. cap. 27.

† Vide Lib. xxiii. sub Finem,

Heat,

Heat, frequently intercurring, of a Lassitude also, and Kind of Pain all over their Limbs, as if fatigued with Labour; and yet in the mean Time they walk about, but in a yawning, listless Manner. Soon after come on an Oppression on the Præcordia, Nausea, Heaviness of the Head, a Pressure, or Stricture as it were on the Temples, or some Degree of Giddiness. The Pulse is always frequent but commonly weak and irregular, and yet there is never any great Heat, but oftentimes whilst the Palms of the Hands burn as it were the Extremities are cold, whilst the Head seems on Fire the Feet are as cold as Ice—The Disease advances daily, and it now seems a Trouble to speak, or move, and forthwith they are forced to take to their Bed before they were aware of it, and are scarce capable of describing in what Condition they are, and become either too soporose, or lie continually wakeful, and agitated with a perpetual Anxiety: In the mean Time they never ask for any Thing, nay not even for Drink. The Tendons now start, and the Hands tremble, as doth likewise the Tongue, which, covered with a whitish Mucus, is yet not very dry, except in the very Middle, where it is greatly parched, and of a brown Colour. At length they begin to mutter to themselves, and talk inconsistently, but still they are without the Fury of a Phrenzy,

Their

Their Urine is commonly thin, but not bright, resembling dead Wine, or Small-Beer, that is vapid, sometimes it is limpid, sometimes blackish, now and then pretty thick, as if coarse Meal had been thrown into it. They have short unequal and transient Sweats, which are often cold and clammy, and often very profuse, and frequently, a little before their Death, exceeding cold, with an extremely small formicating Pulse. In the mean Time they are continually feeling, and fumbling with the Bed-Cloaths, and catching at empty Shadows, then the Tongue falters, the Nails and Fingers grow livid, perpetual Sighs and a cold Breath are the sure Harbingers of a very speedy Diffolution.

This is a true Picture of this terrible Fever ! which they call nervous, because it seems to affect the Nerves chiefly ; it is also called a slow Fever, because it is protracted to the one and twentieth Day, and often beyond it.

It is always very dangerous when attended with black Aphæ, brown livid, or black Spots, or Vibices ; especially if a Diarrhœa succeeds, and the Stools are Lead-coloured, black and colliquative, or if oily, clammy Sweats come on. When this slow Fever is accompanied with Pustules, Papulæ, or Spots, it is most commonly contagious, but, when the Eruptions are of an ill Kind, it is generally called malignant.

lignant. A copious, red, florid Rash, or a great Number of turgid miliary Pustules, breaking out near the State of the Disease, betoken well, especially if a copious, continued Spitting then happens, or a large Quantity of thick subsiding Urine.—A mild Diarrhoea also about that Time is often useful; but more frequently a kindly, warm, universal, and equally diffused Sweat: Sometimes a Swelling of the parotid Glands appears with Advantage, and sometimes a whitish mild Thrush. People on the Recovery grow deaf, and have oftentimes a salutary Abscess in the Passage of the Ears.

It is certain from the Observations both of the ancient and modern Physicians that putrid, slow Fevers rage most in a too moist and thick Constitution of the Air, continuing a considerable Time, particularly if unusual Heats accompany it—Every one knows what rainy, dirty Weather we have had for some Years past; in the Years 1734 and 1735 we were perpetually deluged as it were with Rains and Floods; in Summer we saw very little of the chearful Face of the Sun, in Winter we wanted wholesome Frosts to purify the Air; in a Word, it rained all the Summer and all the Winter, the Atmosphere in the mean Time, contrary to the common Course of Nature, was surprizingly warm, but excessively moist:

Hence

Hence slow and nervous Fevers, Remittents and Intermittents were vastly common: And hence such Kinds of Fevers always infest low, damp Situations: And such more especially are seized with them as by Nature, or Accident, are very weakly, or have their Spirits greatly broken by Trouble, or use a crude, unwholesome Diet, as is the Case commonly in Prisons; those also are liable to these Disorders, who make an inordinate Use of Cucumbers and Melons: For all these several Causes destroy the Tone of the Fibres, produce a faulty Lensor in the Humours, and very greatly stop Perspiration.

But this Sort of Lensor is widely different from the glutinous Quality of inflamed Blood, which arises from too great a Motion of the Humours, and too strong an Action of the Solids; for this is found in the Crassamentum of the Blood, which resembles as it were a Piece of Buff-Leather, the former chiefly affects the Lymphatic Juices—If you compare the Blood of such as labour under a Pleurisy, Rheumatism, or ardent Fever, with that of those in a slow nervous Fever, you will find a vast Difference; this latter when it runs out of the Vein appears of a livid Colour, the former is very florid; this when quite cold hath but a small Portion of Crassamentum, but much dark-coloured Serum, which is of-

ten

ten turbid; that much fizy Crassamentum and but little Serum.

Physicians very justly make a very great Difference between a sanguineous and pituitous Apoplexy, there is certainly no less between the inflammatory and nervous Fevers; the former hath a very rapid and strong Circulation of the Blood, hence a great Attrition of its Particles, and thence vehement Heat, the Urine is also rendered very high-coloured, and thus at length the Blood is very greatly condensed: For by the increased Motion of the Fluids, and strong Oscillation of the Vessels, the red Blood-Globules (which both contain and retain the greatest Heat) are increased in Quantity and Density, on Account of the very great Force with which these chief Principles of the vital Fluid are wrought up together.— Besides the inflammatory Fever all at once seizes even the most Robust, and is often productive of most violent Pains, and either kills them soon, or soon leaves them, besides it most commonly rages in very dry and serene Seasons.

The slow nervous Fever on the Contrary comes on but slowly, and in it the Force of the Solids is very much weakened, the Pulse is languid though frequent, nor is there ever a sharp Heat of any Duration; besides, when any such happens, it is presently succeeded by
a Chilness :

a Chilnefs : The Urine, commonly thin and pale, ſhew the Powers of Nature are broken, and that the Humours are too weakly moved—In ſuch a State of Things, *viz.* a Defect of proper Motion of the Fluids and Inactivity of the Solids, the red Globules of the Blood are eaſily diſſolved—Thoſe that labour under this Diſtemper are ſo far from complaining of Pain, that they lie ſtupid and inſenſible, and ſcarce feel the ſharpeſt Bliſters—Beſides this Diſeaſe is ſeldom met with, except during a moiſt and warm Conſtitution of the Atmosphere, and robuſt and active People are ſeldom ſeized with it.

But I chuſe to enter a little further into this Matter, that we may ſee what Nature doth or ſuffers in Fevers——Let us take for Example a regular intermittent Fever ; the Cauſe of which is undoubtedly too great a Viſciduity and Thickneſs of the Blood, which ſticks in the capillary Veſſels at the Coming on of the Paroxyſm, and produces a cold Feel, Shivering, Paleneſs of the Extremities, and Lividity of the Nails ; all ſufficient Signs ſurely of an obſtructed Circulation of the Blood. Now if Nature is indued with ſufficient Force, ſhe makes Uſe of the very Fever as a Remedy : For if the Fibres have due Strength, and the Humours are not too tenacious, ſhe preſently raiſes a Fever, by which the thick, obſtructing Humours are vehemently agitated, and in a
ſhort

short Time so comminuted, that they are rendered fit to pass the smallest Ramifications of the Arteries, &c. and thus, the Obstructions being removed, and a Sweat breaking forth, the Disorder is quite carried off, at least, for a Time—But when the Vessels vibrate with great Vehemence upon very viscid and tenacious Fluids, and propel them with very great Velocity and Force, there arises so great a Degree of Friction and Heat that oftentimes an ardent, and continual, Fever is excited, or great Inflammations, especially where there is a great Acrimony in the Blood, or stimulating Medicines are preposterously made Use of, which increase the Effervescence of the Blood already too great.

On the contrary, when the Powers of Life, from what Cause soever, are rendered too weak, the animal Fluids are not driven on with sufficient Force, the obstructing Lensor sticks in the Extremities of the Vessels, which, continually increasing, quite stops the Circulation, for those that perish by an intermittent Fever almost always die in the Cold-Fit, from a Want of due Power in the Heart and Arteries to overcome the Resistance of the morbid, obstructing Lensor. To bleed in this Case would be quite murdering the Patient, though in the former altogether necessary—Hence it may be easily understood why Fevers often
change

change their Type, and why almost all that continue a long Time at length put on the Nature of a nervous Fever, the Elasticity of the Fibres being lost, and the Humours too much thickened.

Let us suppose now that this Lensor resides only in the serous Arteries, which ought to secern the most pure Part of the Serum, under the Name of Lymph, or nervous Juice, and that at the same Time a debilitated Tone of the Fibres concurs with it, a Fever of the slow, nervous Kind is generated. For, when the obstructing Lensor stops in a great many of these exceeding small Tubuli, more of this very thin Latex, or Succus nervosus, is passed through those of them that continue open (for if all were bunged up Death would soon be the Consequence) and hence arise great Inequality, and Inconstancy in the Pulse, Heats, and Sweats. Besides the longer this viscous Lymph stagnates in these complicated Arteriolæ (or glandular Convolutions if you will call them so) the more acrid of Course it grows, till at length it turns into a Kind of sanious Ichor, which, being continually reſorbed into the Blood, at last contaminates the whole Maſs; and a very great Degree of Acrimony is generated; and yet, from the Debility and Want of due Vigour in the vascular and nervous System, no very rapid Motion, or violent Heat is excited
in

in the Blood; the Lentor however hence daily increases.

Probably the Case is thus;—When from the Causes above-mentioned the Solids of the Body are weakened, and the Motion of the Blood retarded, the Humours are neither duely attenuated, or properly mixed, whence a Lentor is naturally produced, especially in the Minima Vascula, where the very thinnest Liquids ought to flow. Hence Obstructions arise in the ferous Arteries, and in the ultimate Ramifications of the Arteriolæ of the Brain; a due Secretion of the Lymphatic Juice is thence hindered, and what is worse a Defect of the Succus nervosus also follows; thus the nervous System is deficient in its Office, and thence innumerable Evils!

Whoever well considers the great Bulk and exquisite Structure of the Brain will not deny that the nervous Juice is altogether necessary to the Animal Œconomy, without which the Nerves cease from their Office, and the Action of the Muscles that depend upon them; as is most particularly, and clearly seen in the Muscles that serve to involuntary Motions; for when the Nerves of the Par vagum, or Intercostal, or their Origin in the Brain, are obstructed, or compressed, almost all the vital Actions forthwith cease, and it is not in the utmost Power of the Soul, or Volition, as we

call it, even in the least to restore these Motions—This corporeal Medium therefore is necessary, to muscular Motion; but whether it animates, or only moistens the Nerves, I shall not here take upon me to say; however it is at least evident that whilst it is duely supplied, according to the Order of Nature, to the Nerves that minister to the involuntary Motions, the Action of the Heart, Stomach, Intestines, &c. goes on regularly, whether the Soul wills, or wills it not.

But that there is a very great Obstruction of the Nerves in flow, nervous Fevers is very manifest, because all the Senses of the Body are exceedingly depraved, they scarce, see though their Eyes are open; the Smelling is lost, and so is the Hearing; they scarce taste even the most poignant Things, their Limbs are so torpid that the most acrid Epispastics make little Impression on them, and are scarce felt—All this from an Obstruction of the Medium of Sensation.—The pale, fallow Colour of the Skin, the frequent Rigors, the coldish and torpid Extremities, the Paleness of Ulcerations and Blisters, and the sudden Drying up of them, though irritated with sharp Stimulants, denote a high Degree of Lensor and a greatly obstructed Motion of the Humours in the ultimate Ramifications of the Capillaries.

Besides

Besides when the Secretion of the Liquidum nervosum is diminished, the Action of the Solids on the contained Fluids is weakened, so that from this Cause also the Lensor is daily increased, whence the Obstruction in the Serous, or Lymphatic Arteries is also continually increased. But from hence the diluting Lymph is more sparingly refunded to the Blood, which thence grows more thick, and more acrid, and less apt to pass through the extreme Capillaries; so that it stagnates in the ultimate Branches of the Arteriolæ, and produces black, livid, or brown Spots, and oftentimes Vibices, on the Skin; but within Gangrenes, or by a longer Stagnation, it at length runs into a putrid Sanies.—What I have said of the Nature of a nervous Fever may be sufficient, and perhaps may seem more than enough; this at least is evident, that, as there may be various Degrees of every Kind of Fever, to wit, in a compound Ratio of the Strength of the Solids, the State of the Humours, and Acrimony of the Blood, so also in this especially of which we are now treating: Perhaps even the same Species of Fever is not altogether similar in any two Persons, therefore no certain and fixed Method of Cure can be absolutely determined upon (for here the Skill and Judgment of the Physician, that immediately attends the sick Person, is particu-

larly required) however I will set down in a few Words, what may be most useful.

If ever Blood is to be drawn off in these slow Fevers it should be only at the very Beginning of the Disease, and truly in a small Quantity; for Persons, that labour under an ardent or inflammatory Fever, bear the Loss of sixteen Ounces of Blood with much more Ease than those in a slow Fever do eight—The Strength of the Patient and the Pulse best shew the Measure of doing it—It is much more safely done by Scarification and Cupping than from a large Vein, and the Head is much better relieved by it, nay, and commonly the Oppression of the Breast also, nor if repeated is it hurtful, which cannot be said always of drawing Blood from a large Vein: Nay often, even in the very State of the Disease, where a Delirium or a Coma are very urgent, it is altogether necessary.

After Bleeding a Blister is to be applied behind each Ear, especially if the Pain of the Head, or Vertigo, is severe—After a few Hours a gentle Emetic may be exhibited, by which the Load of Phlegm and bilious Matter may be thrown off from the Stomach: By this also the whole System of the Vessels is strongly shook, and agitated, and the inherent Lensor thence expelled—My Reason for applying the Blisters some Hours before the Exhibition of
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the Vomit is, that by their Irritation on the outward Parts of the Head and Neck more Blood may be passed up by the external Carotid-Arteries, and less of the Lensor forced into the Substance of the Brain by the Action of Vomiting. — We daily see what great Effects Blisters behind the Ears have in relieving the Brain, especially in little Children that are seized with Convulsions, or a Coma, when the little Ulcerations, or Running behind the Ears, are suddenly dried up, for in that Case blistering the Parts draws out the Humours again, and forthwith discusses the Disorder.

If the Patient should not have a Stool or two after the Vomit, an easy Clyster should be injected, and that too afterwards every third Day, for, when indurated Excrements remain in the Intestines, they disturb the Animal Œconomy a thousand Ways, especially if the Rectum happens to be stuffed with them, for then they press on the Bottom of the Aorta, and impede the free Descent of the Blood through the Iliac Arteries, whence too great a Quantity is forced up to the Brain : We may further add that soft Clysters of Milk and Sugar, or the like, by their emollient Warmth are a kind Fetus on the Viscera of the Lower-Belly, and draw down a greater Quantity of Blood to those Parts, whence they also greatly promote Urine.

Blisters are useful at all Times of the Disease, so that, when these first applied dry up, others should succeed; for by these the oscillatory Motion of the Vessels is promoted, and the subtile Salt of the Cantharides incides the viscid Humours, and at length expels them.

I would advise an Occipital Blister to be always applied at the Coming on of the Fever, especially when it attacks the Head severely; for its Action is much in the same Manner as of those behind the Ears, however it doth not excite such sharp Pains, and yet is equally serviceable in preventing a Delirium—Indeed in this Distemper Epispastics give so little Pain generally, that from the great Stupor of the Patients they are scarce felt; indeed the more they are inflamed, pain and rouse the Sick, there is commonly the greater Hopes of their Recovery.

What is attempted by Vesicatories applied externally should be endeavoured at also by internal Medicines: Such as we call Attenuants, and gently irritate the nervous Fibrillæ, are most useful; I chiefly recommend Cinnabar, and the mild Alexipharmac Cephalics, such as Lap. Contrayerv. Confect. Raleigh. Sal. Succin. Sal. C. C. Sp. Lavend. C. Sp. Volat. oleof. and Camphire particularly, which is a Kind of Sal. Volatil. oleof. for, being composed of most penetrating Salts involved in a most subtilized Sulphur, it permeates the most minute
Vessels

Vessels of the Body, digests the thick Lymph, and dissolves the slimy Lentor ; by this Means it excites wholesome Sweats, and (Galbanum or fine Asafœtida being joined with it) produces Sleep more happily oftentimes than even Opium itself, and more powerfully carries off a Delirium.

Certainly nothing is of more Advantage in this Fever than to excite kindly and universal Sweats, for by this Means it is soon extinguished, or in a little Time changed into a Remittent, or Intermittent. But a warm Sweat ought to be equally diffused over all the Body, for, if it is very short, or cold, or only about the Head and Neck, it is a bad Symptom, but to fall into a Shiver whilst sweating is exceeding dangerous ; the mild equal Sweat recruits both Strength and Spirits.

But, during the Use of Epispaustics and Attenuants, there should be a very plentiful Dilution carried on with very thin Liquors, mild indeed but somewhat detergent, with very thin Wine-Whey, Decoët. Lusitan. Decoction of Eryngo-Root, Infusion of Sage, &c. that the gross Salts may be washed off, and a due Quantity of Serum may be preserved in the Blood, which otherwise, from the perpetual Exhalation of the most thin Part of it, would run into a mere Glue almost—But it is very seldom that mere cold Water, which some so highly extol, is serviceable, for it is almost as

difficultly mixed with the Blood, as Water with Oil, unless by the Mediation of Sugar, or some other essential vegetable Salt—I have sometimes seen Persons labouring under an ardent, and some also under a nervous Fever, who drank largely of simple, cold Water, which they presently rendered off by Urine as limpid as they drank it, and scarce at all altered—certainly to their great Prejudice.

The seventh, ninth, or eleventh Day of the Fever, and sometimes the fourteenth, a red Rash, miliary Pustules, or some other Efflorescence frequently break forth, and greatly alleviate the Disease, especially if the Eruption is florid, and the Pustules vivid and turgid—The greatest Care is then necessary that the Sick may not take Cold, and gentle Cordials are every now and then to be administered, which may assist Nature in exterminating the sharp, slimy Humours, which, sticking in the Extremities of the cutaneous Arteries, form these pustular Eruptions. The brown, livid, or black Exanthemata indicate a pestilential Disease, and that the Blood is very greatly corrupted, and almost turned to a Sanies; in this State indeed the Blood is so dissolved, that the Stools are most commonly bloody and sanious; nay the Blood, if drawn from a Vein, scarce at all forms into a concrete Crassamentum, as usual; as the very learned Dr. *Lyster* hath long since observed.

In such a deplorable Condition we must forthwith have Recourse to astringent Alexipharmacs, and Acids, such as the *Peruvian* Bark with *Virginian* Snake-Root, *Mynsicht's* Elixir of Vitriol, Tincture of Roses, mulled red Wine, &c. for these are the most adapted Things to preserve the Tone of the Fibres, and Texture of the Blood.--The *Peruvian* Bark hath been found by late Experiments very efficacious in stopping the Advance of Gangrenes, and I have found it truly and greatly useful joined with Alexipharmacs and Acids, in preventing the Putridity of the Humours—Perhaps, in such a Case, there is scarce a more noble Antidote than austere Wine heated up with Aromatics, for it more safely, and more efficaciously supports the Powers of Nature, than Spirit of Wine, though imbued with aromatic Drugs, and enobled with the Title of Cordial-Waters.

In the mean Time the Sick should be nourished with thin Broth, Panado, Gellies of Sago and Harts-Horn, little at a Time indeed but often; for in such a dangerous Case there is little Hopes of Recovery, but by gaining Time, and gradually breaking the Force of the Distemper, that at length a Cure may be effected.

Moreover at the State of the Disease, or a little after, a Thrush sometimes breaks out in
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all Parts of the Mouth and Fauces, if the Aphthæ are black they are exceeding bad, nor are the uncommonly white Sort void of Danger: Sometimes they seem to rise from the very Bottom of the Throat, sometimes they run down all the alimentary Canal, and excite a Singultus, Diarrhœa, or Dysentery: Of what Kind soever, they generally denounce a very difficult Crisis, especially if a Dysentery and Hiccough accede—It is much better when a Kind of Salivation comes on copiously, for by this Means indeed the Fever is often terminated, the offending Lensor being carried off by the salivary Glands—When Aphthæ come on, emollient and detergent Gargles of Decoction of Figs, Turnips, Water and Honey, &c. must be very frequently used, and Rhubarb should be sometimes given, especially if griping Stools are frequent, adding some astringent Aromatics and Absorbents to it: But after every Gargarisation the Patient should hold in his Mouth a little While, and then gently swallow a thin Mucilage of Flea-Bane and Quince-seeds, mixed with Syrup of Mulberries, or Raspberries, for this greatly softens and heals the little Ulcerations.

It is not uncommon that a very tenacious Phlegm so fills up the whole Fauces, that it almost strangles the Patient: In such Case nothing is more proper than to give a gentle Vomit,

Vomit, and that truly at any Time of the Distemper; it is surprizing what great Relief the Sick receive from this, and what an immense Quantity of glutinous Slime, like the White of Eggs, and sometimes even more viscid, is thrown up by it: Nay frequently the Aphæ, Coma, Nausea, Singultus, and ill-boding Blackness of the Tongue, go presently off by it, as the most diligent *Sydenham* formerly observed; and I have very often seen.

Nor is gentle Purging less useful at the Close of the Disorder, interposing now and then Cordials and Paregorics; for this evacuates the putrid, morbid Colluvies thrown into the Intestines by the Mesaraic Arteries, and promotes the natural Crisis, however imperfect; nay it oftentimes causes the Fever, which had hitherto kept to no certain Order, to put on the Type of a Remittent, or Intermittent, and thus makes Way for proper Medicines.—And this is so far from bringing on a Diarrhœa, or Dysentery, which some are so very apprehensive of, that by this Method it is most effectually prevented. For the filthy morbid Matter, by remaining longer in the Bowels, grows daily more and more acrid; and greatly irritates the Coats of the Intestines, and even at length erodes them; hence a fatal Diarrhœa, or dreadful Dysentery; being in Part also resorbed by the Lacteals it raises
again

198 *Of the Constitution of &c.* [1737.
again terrible Commotions in the Blood. That
I may obviate these Evils therefore, I frequent-
ly give a moderate Dose of Rhubarb, and re-
peat it at least every other Day, and in the
mean Time, if necessary, restrain too fre-
quent Stools by the Use of astringent Aromat-
ics and Anodynes.



A
SMALL TREATISE
ON THE
DEVONSHIRE COLIC,

Which was very Epidemic

In the Year MDCCXXIV.

TO

T O
The Most EXCELLENT
Doct^r JAMES JURIN,
Fellow of the ROYAL COLLEGE
O F
P H Y S I C I A N S,
A N D O F
The ROYAL SOCIETY.

S I R,

AS it was owing to your particular Exhortation that I entered upon making these meteorological Observations, which I have now finished, the Public is chiefly indebted to you for any Benefit it may receive from them—From a grateful Remembrance of the many Favours I have received from you, I dedicate this little Piece to you.—Wishing you long Health and much Happiness! I am,

Ec. Ec.

J. HUXHAM.


November 13th, }
1738.

O N



O N T H E

DEVONSHIRE COLIC.


 N the Begining of Autumn, 1724,
 a Disorder exceedingly epidemical
 spread itself over all the County of
Devon, amongst the Populace espe-
 cially, and those who were not very elegant
 and careful in their Diet. Perhaps it will not
 be unuseful to give a History of the Disease,
 and the Method of treating it, because, though
 it may not rage with the same Degree of Vio-
 lence, and affect a vastly less Number of Peo-
 ple, yet it infests this Country more or less al-
 most every Autumn.

This Disease began its Attack by an exces-
 sively tormenting Pain in the Stomach, and
 epigastric Region, with an unequal, weak Pulse,
 and coldish Sweats; the Tongue in the mean
 Time was coated with a greenish, or brown,
 Mucus, and the Breath was most offensive.
 An enormous Vomiting soon followed, for the
 most Part of exceeding green Bile, sometimes
 R black,

black, with a great Quantity of Phlegm excessively acid and very tough; nay the foul Matter brought up was oftentimes so very acrid, that, by excoriating the Throat and Oesophagus, it was tinged with Blood, and created a Difficulty and Pain in Swallowing— Things continuing in this State for a Day or two, the Belly became extreamly bound, neither answering to the most drastic Purges, or sharpest Clysters, the latter coming off without Wind or Stool, the former being soon vomited.

The Vomiting abating somewhat, the Pain descended, and most grievously tortured the umbilical Region, and Small of the Back, so that you would have thought the Patient actually laboured under a nephritic Paroxysm, and the rather as a Suppression of Urine now also comes on, and yet a perpetual Desire of that Discharge is urgent; nay very frequently there is a most troublesome Sense of a Weight in Perinæo, as if from an incumbent Stone.— Such a Difficulty of Urine in colical Disorders *Aretæus Cappadox*, of old, hath noted Capit. de Colic. Νεφρὸς καὶ Κύστις συμπαθεῖα Πόνω καὶ Ἰσχυρίῃ τῆλεῖσιν ἄλλα ἀντ' ἄλλων. And *Hippocrates* in the first Book of Epidemics, Sect. 2d. Περίρροιαι εἰς τὴν γαστρίῳδον, ἢ νεφρικήαι, ἄλλα τῆλεῖσιν ἀντ' ἄλλων ἄλλα.

The Urine was high-coloured, and resembled a Lixivium, depositing a large Quantity of

mucous,

mucous, red, and sometimes a greenish Kind of Sediment—The Abdomen was for the most Part very hard, and exceeding tense, insomuch that the Sick were very anxious lest it should burst; on the contrary, in some, it was so greatly contracted by Spasms that there was scarce any Belly to be observed: This however did not so very often happen as the tense swollen Belly—There was frequently a violent, fixed, burning Pain in the right Hypochondrium, where was also both Hardness and Swelling. In the Region of the Epigastrium there was often felt a great and troublesome Pulsation: Whenever Nature of her own Accord (which was very seldom) discharged any Thing from the Guts, or when solicited, or forced by Medicine, it was always in the Form of exceeding hard, small Balls, of a greenish black Colour resembling Sheep's-Dung: After two or three such Stools what was brought off was somewhat softer, but green, or black, and sometimes tinged with Blood, which created a very troublesome Tenesmus: But the Belly was soon shut up, and if purged again, though but at the Interval of a few Hours, again discharges such small and exceedingly hard Globules.

Thus was the first Stage of the Disease; but the Tragedy was not yet over, nor this the End of the Calamity, for though the terrible Gripping and Pain of the Belly might have

ceased a little, (an extream Tendernefs of the Skin, scarce bearing the least Touch, however remaining) a most excruciating Pain now seized the whole Spine of the Back, most violent between the Shoulder-Blades; thence soon affecting the Arms it fixed chiefly in the Articulations, and altogether destroyed the Motion of the Hands—nor were the Legs and Thighs much less tormented, for a very sharp Pain affected them, fixed in the very Bones as it were, and resembling those of the Lues Venerea, and yet there was seldom any Redness, or Swelling of the Parts.

Whilst the morbid Matter was passing from the Intestines to the Limbs the Pulse beat stronger, and the Sick had feverish Heats; nay some in this State of the Disorder grew delirious, which a Kind of limpid Urine certainly and constantly indicated: And indeed it was very remarkable, that if the Sick rendered pale Urine without a Sediment, at any Time of the Disease, they were suddenly seized either with Convulsions, or a Delirium, or a Palsy of the Hands, sometimes with, and sometimes without Pain.

When the Malady had fallen on the Limbs, a large, foetid, four-smelling Sweat mitigated the Pains, and, if any Gripping in the Belly remained, upon the Coming on of the Sweat it vanished. Some, dissolved as it were in a long

long and very profuse Sweat, totally lost the Use of their Hands, the Power of Feeling only remaining; Palsy for Pain, a miserable Exchange! However I scarce knew any one, that laboured under this Disease, seized with a Palsy in his Legs,—Sometimes a great many red itching Pustules, and often very burning and smarting, broke out with the Sweat all over the Body, which was of very happy Omen, as on this the rheumatic and colical Pains soon vanished.—This indeed was the most favourable Issue of the Disease, but much more commonly the Rheumatism succeeded the Colic, the Colic the Rheumatism, and thus alternately tormented the miserable Patients, the Disease now being translated to the Limbs, now to the Bowels.

Sometimes the tormenting Pains would cease for a few Days, and then return with equal Vehemence, especially on taking the least Cold, or drinking Beer, or Cyder—The Appearance of a Jaundice sometimes took off the Colic for a Time, but as soon as that went off the Colic immediately returned — In one, or two Cases, however, a permanent Icterus absolutely carried off the Disease, some Pains only remaining in the Limbs.

Although the colical Pains most commonly preceded the Rheumatic, yet frequently the Disease affected the Limbs first, and then, by

a Metastasis of the morbid Matter, the Stomach and Intestines in the Manner described. —I knew a certain Inn-Keeper attacked in a truly surprising Manner, for he almost intirely lost the Use of his Hands and Arms, though before a strong Man, antecedent to any other Symptom of the Malady, nor did any come on for a Day or two, only that he seemed to be a little more languid than ordinary; however very soon after both a Vomiting and Colic seized him, and at length a rheumatic Pain tormented the paralytic Limbs.

Some, but very few, after having been long and greatly afflicted with this Disease, were seized with Epileptic-Fits, and died of it: But to say the Truth, whether I consider the very great Number of Persons that laboured under it, or its Violence and Duration, I greatly wonder so few became Victims to it.

This Distemper was most violent when northerly Winds prevailed, which was likewise true of the Small-pox, that raged also at that Time.

They, who had naturally lax Bowels, suffered less by far from this epidemic Disease than they, who were more costive: This perhaps may be the Reason why Children (who are generally loose) were not so severely tormented by it as the Adult,

This

This epidemic Colic continued from the Autumn to the following Spring, but, as the Summer advanced, it totally vanished.

You see here a short, but exact Description of this Disease, which was so vastly common amongst the Populace in the Year 1724, that there was scarce a Family amongst the lower Rank of People that had it not—nay I have very often seen five, or six, lying ill of it in one and the same House: And indeed I scarce believe there was ever a Colic so epidemical before, except that mentioned by *Paulus Ægineta*, Lib. iii. Cap. 43. sub Finem, which, as to many of the Symptoms, was not much unlike ours: Here therefore I will set down the Description of it from *Paulus*: “ Ἀρξαμένου μὲν
 “ τοῦ Πάθους ἀπὸ τῶν κατὰ τὴν Ἰταλίαν Χωρίων, καὶ ἐν
 “ ἄλλοις, &c.”—“ This Disease (*viz.* the Co-
 “ lic arising from sharp and acrid Humours
 “ vellicating the Intestines) began in the neigh-
 “ bouring Parts of *Italy*, and several other
 “ Places of the *Roman* Empire, and ran up
 “ and down like a Pestilence: It brought on
 “ epileptic Disorders on many, and deprived
 “ others of the Use of their Limbs, the Feel-
 “ ing however still remaining perfect; some
 “ were attacked with both these Symptoms,
 “ but a great Part of those, who from this
 “ Disorder were seized with epileptic Fits, died,
 “ but the greater Part of those who fell into a

“ Palsy escaped, the morbid Matter being as
 “ it were critically thrown on the Limbs.”

Whether this epidemic Disorder depended in any Degree on any peculiar Constitution of the Air, I know not, for as much as it was equally violent in dry, or moist Weather, during the Prevalency of a South, or North-Wind.—Indeed in a dry and cold Season, sharp northerly Winds blowing, I observed the griping Pains to be most vehement; but this happened perhaps from the Diminution of the Perspiration, and greater Constipation of the Belly, which then happens; according to the Oracle of Physic, *Hippocrates*, αἱ καθ’ Ἡμέρη Κοιλίας-άσεις βόρειοι τὰς Κοιλίας ξηραίνουσι, Aphorism. xvii. Sect. 3. Edit. Hollerii.—But however this may be, I believe no one will reckon this Disease in the Number of the contagious; unless he would also call every Kind of popular Disease contagious, which is neither agreeable to the Meaning of the Word, nor common Manner of Speaking.—Epidemic Diseases indeed arise from some common Cause, as perhaps from a corrupted State of the Atmosphere, unwholesome Meat and Drink, or the like, but very often even not in the least from any morbid Effluvia, that communicate the Disease from the Sick to the Healthy.

If I am not greatly mistaken the Cause of this Epidemic was very manifest, to wit, such an incredible Quantity of Apples as we had
 that

that Year, greater indeed by much than was ever known in the Memory of Man, at least in this Country—The Apple-Trees, overloaded and almost breaking under the Weight of their Fruit, offered as it were their Branches to those who would pluck, and take off their Burden—You might have bought as many Apples for the most trifling Price as would have made a Hogshead of Cyder, nay any one might have had a Sack full of Apples for the mere Labour of gathering them—Several of the Farmers with impious Ingratitude murmured at kind Providence, as too prodigal of her Gifts, and threw vast Quantities of Apples to the Hogs—but the Swine-Hogs, as well as the Swine-Men, suffered from the gluttonous Abuse of the Apples, and all of them wasted greatly in Flesh, and many died.—Some more pious perhaps, but not very sober, daily swilled down whole Gallons of Cyder, nay even hired People to drink it, lest forsooth God's Blessings should be thrown away; and again and again filled up the Casks as they drank it out. A Sacrifice perhaps acceptable to a drunken *Bacchus*, but by no Means approved of by the Supreme Father of Gods and Men!—It is certain, that, at this Time, all the Vessels they could get, and made of all Kinds of Timber, were not sufficient to contain the enormous Quantity of Cyder, that was then made.

As

As there was therefore such an infinite Quantity of Apples, the lowest Sort of People fed almost intirely upon them : Apples in one Form, or another, were in all their Diet ; Cyder (I should rather call it Must) was all their Drink ; for this being cheaper than the smallest Beer, indeed almost as easily procured as Water, and yet far more grateful, the joyful Populace drank abundantly, ignorant of the future ill Consequence.

That the long continued Use, shall I say ? or Abuse of this Apple Drink and Diet, was the Cause of this Disease I doubt not, for I saw no one seized with it, that abstained from them, nor did it attack any People of the better Sort, that lived elegantly, for they (as the Fashion is) despising cheap Things, scarce ever tasted the Apples, or if they did so, using much Flesh and Spices in Diet, and daily drinking generous Wines, corrected the crude noxious Juices of the Apples.

It hath been an old Observation that when Apples abound colical Disorders are very frequent, infomuch that, in this Country, they are endemic and epidemic every Autumn ; and as, *Horace* says, they feel — pomifero grave Tempus Anno. Lib. iii. Od. 23. — I well remember in the Year 1722, which was a very bearing Year for Apples, that colical and rheumatic Disorders raged very much, but nothing

thing in Comparifon as to Violence, or Number, with thofe obferved in the Year 1724.— The fame Thing I remarked alfo in the Years 1728 and 1730, in which there was a vaft Plenty of Apples alfo: But it was worth noting, that in thefe Years the Diarrhœa was much more common than in the Year 1724, which greatly alleviated the Colic and Rheumatifm; the acid and acrid Juice of the Apples neither long remaining in the Inteftines, or the Blood, but was forthwith carried off through the Guts— But in the Year 1734, which was alfo a very great Year for Apples, the Diarrhœa was lefs frequent, but the Colic much more fevere, and frequently attended with a Palfy of the Hands and Arms.

I know it may be asked me why the Juice of Apples in one Year produces a coftive Belly with violent colical Pains, but in another a loofe Belly with fcarce any Gripes attending? Which Queftion indeed I cannot well answer, but let him, that puts it, tell me why Apples of the very fame Kind, and in all Refpects alike, as far as we can difcern by our Senfes, rot much fooner in one than in another Year, as is very commonly obferved. I will only take Notice, of what perhaps is fufficiently known to all, that the more mild the Apples are, the more certainly and readily they loofen the Belly, fo that the more moift and warm
the

the Season shall have been, so much the milder shall Apples and all the Fruits of the Autumn be, and more disposed to Putrefaction, and to cause an open Belly—This Observation abundantly confirms.

Let me now explain a little the Nature of this Apple-Juice—The expressed Juice of Apples (and of Grapes also) whilst unfermented, abounds with a very gross, essential, acid Salt, or Tartar, and with many earthy Particles and much impure oleaginous Matter :— The more acerb the Fruit the more of the gross essential Salt there is in it, as is manifest in the *Moselle* Wines, and our Cyder, the latter depositing the crude Tartar loaded with a great Quantity of mucous Matter to the Bottom of the Cask, the former throwing off Abundance of the tartareous, or essential Salt, to the Sides of the Vessel. Nor doth *Rhenish*-Wine indeed much differ from generous Cyder, except that the Cyder much more abounds with mucilaginous Matter; for their native Salts seem very nearly alike, and examined by the Microscope appear exactly of the same Figure; and the Salts of both require a long Time to be so duly broken and attenuated as to produce Liquors fit to drink and wholesome—nay Cyder made of the very sour and acerb Kind of Apples is neither a grateful or healthy Drink

Drink till after the second, or even the third Year.

If you drink either of those Liquors too new you will be certainly plagued with colical and rheumatic Pains: Gouty Persons never drink them with Impunity, for they are thence presently seized with an arthritic Paroxysm—Nor are the tippling *Germans*, that inhabit the Banks of the *Rhine* and *Moselle*, more severely afflicted with Gout than our Countrymen, who are continually swilling large Quantities of Cyder; for both there and here the Gout is endemic and exceeding common, nor are there any where so many, even amongst the very common People, as in the County of *Devon*, most famous for Cyder, that are afflicted with the Gout—And it is reasonable to believe that the Frequency of the Disease, in both Countries, is owing to the large and long continued Use of vinous Liquors, that very greatly abound with Tartar; such as the *Moselle* and *French* Wines, and our Cyder; for, since the Use of them hath much prevailed, the Gout hath been far more frequent than heretofore—Claret, the Favourite-Drink of the present Age, was not in much Esteem about a Century ago: And there is ten Times as much Cyder now made and drank, as there was about thirty, or forty Years since.

But

But if any one doubts whether there is such a vast Quantity of Tartar in the Apple-Must, let him try, in the Manner excellently well described by *Angelus Sala* (to wit by separating the Mucilage from the Juice) what Quantity of essential Salt may be obtained from it; and he will find it truly very great.—Cyder indeed doth not, like *Rhenish*-Wine, throw off its Tartar to the Sides of the Cask, but this is no Argument of the Want of it; for even *Rhenish*-Wine doth not give off its Tartar to the Sides of the Vessels, till after it hath deposited its mucous and earthy Parts.—In like Manner *Spanish*-Wines fix no Tartar to the Sides of the Cask on Account of the too great Quantity of an oleaginous tough Matter, in which it is involved: Nor is it possible by any Art to separate the essential Salts of Citron, or Lemon, from the Juice, and yet certainly as much abounding with acid Salt as any Kind of Vegetable, because it is wrapped up in a vast Quantity of Mucilage, as the before named *Angelus Sala* hath long since observed in his *Tartarologia*; and I have by Experiment found very true.—But that there is in new Cyder a great Quantity of Mucilage is plain from the Roapiness it contracts, like so much Oil, if it is not duly fermented and saturated with an active Salt, which may attenuate the sulphureous Mucilage: For when this is deficient, as in
Cyder

Cyder made of very mild Apples, it is very soon turned into a viscid pendulous Liquor resembling Oil within a Year's Time—But further, I have almost always observed a Kind of tough Skins as it were, resembling rotten Leather in the Tubs where the Cyder was fermented, and such almost always adhere to the Sides of the Casks.

Let us now briefly see what Mischief we receive from drinking the crude Juice of Apples, neither duly fermented, nor properly fined down—Let us hear *Hippocrates's* Opinion of Must, Lib. ii. de Vict. Ration.—Γλεῦκος Φυσᾶ, καὶ ὑπάγει, καὶ ἐκταράσσει Ζέον ἐν τῇ Κοιλίῃ, καὶ διαχωρρεῖ. Φυσᾶ μὲν ὅτι θερμαίνει, ὑπάγει δὲ ἐκ τοῦ Σώματος ὅτι καθαίρει, ταρασσει δὲ Ζέον ἐν τῇ Κοιλίῃ καὶ διαχωρρεῖ.—The Juice of Apples, Grapes, &c. soon ferments, whilst in Fermentation the Air mixed with the Must is very greatly dilated, so that it can scarce be contained by the very strongest Casks. If any one therefore greedily drinks this Must, it necessarily ferments vehemently in his Stomach and Intestines, and hence it distends them greatly with Wind, and racks and gripes them; for on Account of the Heat both the Fermentation and Rarefaction of the Air is very greatly increased: But even oaken Casks can scarce contain fermenting Must, What Mischiefs then may we not think the Intestines are like to suffer from it? Nor will any
one,

one who considers this, be surpris'd to find in medical History Accounts of the Guts having been torn and split by this incoercible Gas, or Flatus.

Nor doth the fermenting Must only hurt the Stomach and Intestines, as being turgid with such very elastic Air, but it hath a very great Power of stimulating and scouring off the natural Mucus of the Guts; scarce any Thing is more saponaceous or detergent than Must, it almost absterges the very Cuticle of him that washes his Hands much in it. It is well known to every one, that is the least conversant in Anatomy, that the Intestines are smeared over with an exceeding soft Mucus, which here (as well as in several other Parts) provident Nature hath designed to abate the Acrimony of what is taken in by the Mouth; but this, the too great Use of such a saponaceous Juice as Apples, &c. afford, quite scours off. Hence arise Vomiting, Cholera, Diarrhœa, and Dysentery, from an Excess in the Use of it: For this Mucus of the Guts being greatly deterged, which should defend the Tunica nervosa of the Intestines, it becomes sensible, and impatient as it were of the very least Acrimony, much more of the gross acrid Salts with which such Fruits abound; and, being on every Side irritated by such Stimuli, this very tender Membrane is grievously affected.

fectcd. The Intestines then, being thus irritated with severe Pain, greatly quicken their peristaltic Motion, that they may expel, as soon as possible, such a very troublesome Enemy: Hence enormous Vomiting and violent Purging; and happy it is generally that an Outlet is thus given to it. For, when the fermenting Humour is shut up within the Bowels, it so vehemently distends them, that they can neither duly contract themselves, nor sufficiently exert their peristaltic Motion to throw off the acrid and tormenting Humours; but, like the urinary Bladder over distended with Urine, thence loses all Power of Contraction and emptying itself.

Hence a most horrible Pain is excited, and thence Inflammations of the Intestines which are soon succeeded by a Gangrene, or a Rupture of the Coats, unless a speedy Remedy prevents it.

But, when either from the astringent Quality of the Apples (for to make our best and strongest Cyder we use the most austere and sour Kind of Fruit, and therefore our Orchards, in this Country, abound most with them) or from the native Strength of the Stomach and Bowels of those, who indulge much in drinking the new Cyder, it shall happen, that it neither provokes Vomiting, or purges by Stool, yet very often very severe Mischiefs

thence follows. For, by long and frequent Drinking of it, such a Quantity of crude, gross Tartar is thrown into the Blood that it thence becomes very acrid, and not only the Blood, but, from that impure Source, all the Humours thence secreted. So that instead of a very soft, lubricating Mucus, separated by the Glands, discovered by Dr. *Havers*, we have as it were a sharp, coagulated Matter; whence arises a great Pain of the Joints and Impotence of their Motion—Instead of an exceeding soft Lymph to moisten the Nerves, a corrosive Ichor, and hence epileptical Attacks. Moreover the Blood being saturate with such a great Quantity of Salts, they attract one the other strongly, and form greater Moleculæ than can pass through the lymphatic Arteries, scarce indeed through the sanguineous Capillaries; hence various Obstructions, and great Irritation on the nervous Extremities.

At length even the very Bile, that variously useful Balam of the Body, becomes corrupted, and quite enervated by the super-abundant Apple-Acid, though in its natural State it was designed to correct Acidity; for it is certain from many Experiments, that when the Bile is mixed with too much Acid, whether vegetable, or mineral, its Powers are destroyed, it is rendered quite inert, and turned almost into a Coagulum.—This is the Origin of many

Evils;

Evils; for when the inspissated Bile stagnates in the Glandules, or Ducts of the Liver, a Tumor, or Induration of it soon follows; whence the Circulation and Secretion through this great Viscus is very greatly impeded: How many and great Mischiefs may thence arise, he will easily perceive, who well considers the Distribution of the cœliac and mesenteric Arteries, and the Course of the Vena Porta, that hath its Origin from their Branches; but, as it would take up some considerable Time to give a proper Description of this, I omit it, and shall only briefly consider the Bile as vitiated by the Acid, and stagnating in the biliary Ducts and Gall-Bladder.

Supposing now the Course of the Bile from the Liver to be stopped, and that nothing of it passes into the Duodenum, the gross, crude Chyle is neither duly attenuated, nor the Acidity thereof properly corrected. But glutinous Chyle entering into the Blood through the Lacteals increases its Lentor, already rendered too thick by the sour, austere Juice of the Apples; hence all the Secretions, which, according to the Order of Nature, should be sufficiently thin, are made much too thick: From this also arise many Evils!—Moreover the Intestines being deprived of the Bile, their proper Stimulus, discharge the Excrements very slowly, and the Belly becomes very much

bound—Certainly the fallow, dirty Colour of the Skin, of all those that labour under this Disease, and also their thick, yellow, Urine, are sufficient Evidences that the Bile is neither duly secreted, nor properly thrown into the Intestines.

Although the Bile, weakened and congealed as it were in the Gall-Bladder and hepatic Ducts, may remain there for some Time effectue and inactive, yet it proves a Snake in the Grass. For if even the mildest Humour of the Body issues forth into any Place out of the Road of the Circulation, and is there exposed to the Heat of the human Body, and continually agitated by the Motion of the circumjacent Parts, it grows daily more and more thin and acrid till at length it becomes a most virulent Sanies, that corrodes all the Vessels. Do we not often see a fine Breast eaten quite away by a horrid Ulcer, occasioned merely by the Stagnation and Corruption of so very sweet a Humour as Milk in it? If this happens to a Humour so exceeding soft, must we not think the same, nay much worse will happen, to the Bile, even in its natural State very much the most acrid Humour in the Body? to which now also a great Deal of the acid Salt is added; which, though it might otherwise, in some Measure, temperate the alkaline Acrimony of the Bile, yet, being continually agitated by the

Heat and vital Actions of the Body, at length even increaseth the Acrimony.

The Bile doth not turn green but by the Affusion of an Acid, and the stronger the Acid so much the greater Degree of Greenness is produced, even approaching nearly to Blackness, and it is also more thickened, so that in Colour and Consistence it resembles Soot mixed with Ink; this appears most clearly when the Experiment is made with human Bile, which perhaps is more alkaline than the Bile of any other Animal.—This seems to me to be far the most common Origin of black and porraceous Bile: They are certainly mistaken who think that these Species of Bile are generated only in the Primæ Viæ, for they, who are conversant in anatomical Dissections, find very often both black and porraceous Bile in the Gall-Bladder, and in the biliary Ducts also.

This is agreeable to Experience, without which all speculative Reasoning about Things is vain, however fine it may seem. I have been oftentimes astonished to see deeply porraceous Bile, and black Choler, as it is called, even much more acrid than the former, thrown up by Vomit, which hath corroded Metals, and fermented with Stones and Earth, as if it had been Spirit of Vitriol; and whilst it was vomiting up it set the Teeth on Edge violently,

and even excoriated the Fauces. These surely are strong Arguments of very high Acidity, truly Spirit of Vitriol scarce gives more: Therefore the Characters, which *Galen*, and others, give of the Bilis atra (which agree also to the porraceous Bile) are, τὸ δριμύ, τὸ ὀξῶδες καὶ τὸ διαξωλικόν, —I had many Years ago under my Care the Master of a Ship, that returned from *Virginia*, who was first seized with colical Pains, and thence fell into very violent Convulsions, and a Delirium; this Gentleman vomited Abundance of most green Bile, and frequently also what was exceeding black, and in the highest Degree acid. It happened, that, whilst he was in Convulsions, his Nurses thrust in a Silver-Spoon between his Teeth to prevent him from biting his Tongue, which upon withdrawing it, a very small Time after, was tinged quite black, as if it had been dipped in Spirit of Nitre. This Gentleman by the Way was extreamly fond of Juice of Lemons, and used it abundantly in all his Drink almost: And I cannot but here take Notice that I have very frequently observed those Persons to be tormented with black and green Choler, who previously laboured with a sharp corroding Acid in their Stomach.—Upon this Occasion likewise I cannot but recount, that about fifteen Years ago I saw the Blood of a young Gentleman, who had been excessively fond of Cyder, Sallad,

&c. and on that Account very frequently tormented with colical and rheumatic Pains, the Serum of which was very deeply green like the Juice of Leaks—See also an Observation I published in the Philosophical Transact. No. 382.

I well know however that the excellent *Sydenham* hath affirmed that porraceous Bile arises solely from the *Ἀλαξία* of the animal Spirits, or severe Passions of the Mind, but this is generally not true. The Passions indeed move Bile, and express it into the Duodenum (and therefore it may be very aptly said his Choler is moved, who is put into a Passion) now when the Bile, thus expressed by any violent Motion of the Spirits, meets with any Acid in the Stomach, or Bowels, it presently turns green, and in great Perturbations of the Mind is very frequently vomited up—But do we not see one Person from some great Agitation of Mind vomiting green Bile, who perhaps a little Time after, from a much greater Commotion, vomits Bile altogether yellow? Do not we see another tossed in a stormy Sea now vomiting exceeding green Bile, and yet in some short Time after he vomits Bile quite of a Saffron-Colour, and so alternately?—Bile indeed out of the Body never becomes green by the most vehement Agitation, unless by the Admixture of an Acid, and therefore, I believe, scarce with-

in. Let me say what I think of the Matter ; vehement Agitations of the Spirits, and great Passions of the Mind, very greatly hurt Concoction, and thus the Chyle turns acid in the Stomach, and, when the Bile is mixed with it, becomes green ; and, whilst the Stomach continues weak, whatever is taken into it is not rightly digested, whence an Acid may continue a long Time predominant in the Stomach and Intestines.

The Bile therefore whether green or black, being ponded up in the Gall-Bladder, and hepatic Ducts, actuated by the Heat of the Body, and at last dissolving, is either taken up by the extream Branches of the Vena Cava, and reformed into the Mass of Blood, or is thrown into the Intestines through the Ductus communis Choledochus. But being now rendered extremely acrid, and mixed with the Blood, it is productive of vast Mischief ; for irritating the whole nervous System it brings on Pains, Anxieties, Spasms ; besides it corrodes the tender Vessels, and is very greatly hurtful to the Brain.—But when it passes into the Guts it causes excessive Vomiting, and terrible colical Pains.

However this acid-atra-Bilis, how sharp so ever it may be, is by no means so pernicious to the human Fabric as the black-alkaline Bile ; for the very strongest Acid doth not so
powerfully

powerfully corrode the Vessels and Parts of the Body, as the strongest alkaline Lixivium, which in a Moment as it were dissolves all Kinds of animal Substances: Nay putrid Bile, unless its Virulence be corrected by an Acid, presently becomes a most acrid Sanies, that corrodes every Thing. Therefore of this Bile only is *Hippocrates* to be understood in an absolute Sense, Aphorism. 22. 23. 24. Sect. iv. and Coac. Prænot. 74 Lib. i. Edit. Dureti; and which *Celsus*, Lib. ii. cap. 8, thus renders from *Hippocrates*, “Tormina ab atra Bile orsa
 “mortifera:” For it is a gangrenous Sanies, that is often consequent to an ill-judged Icterus, or to an Inflammation of the Liver. I have sometimes noted the dire Effects of this, particularly a long Time since in a certain Gentlewoman, too much given to Spirituous Liquors, and who, from thence, fell into a black Jaundice: For she, a little before her Death, vomited a great deal of black, very foetid Matter, and soon after a great Quantity of Blood was discharged ἀνω καὶ κάτω (the Blood-Vessels being quite eaten through) and forthwith she expired—and indeed it is on Account of the Acrimony of the putrid Bile, which presently destroys all Kinds of the Vessels, that a Hæmorrhage in Icteric Disorders is almost always a fatal Symptom.

But

But there is another Species of Black-Choler, or Bile, as it is called, very greatly milder than that just mentioned; which is only a Kind of Recrement of the Blood: Of this last Species of Bile hear *Galen* in his Comment on *Hippocrates's* Aphorism. 53. Lib. vi. “Μεμνησθαι
 “ γὰρ χρὴ τῶν περὶ τῆς μελαίνης Χολῆς, Ἔς. i. e.
 “ It should be remembered in Relation to
 “ what we had said in some of our other Wri-
 “ tings, to wit, that one Kind of it is produced
 “ from yellow Bile, over torrifed as it were
 “ by Heat, which is absolutely very pernicious;
 “ there is another Kind however which
 “ proceeds, if I may so say, from the mere
 “ Fæces of the Blood, which is indeed of a
 “ much thicker Substance than the former,
 “ but of a vastly less malignant Nature.”—
 This *Galen* himself more truly calls *Χυμὸν μελαγχολικόν*.

I have described these different Species of Bile; as it is called, lest any one, by confounding them injudiciously, should think I am saying that of the milder Kind of Bile, or the melancholy Humour of *Galen*, which is only true of the black-acid Bile.

Such great and grievous Evils do Men suffer from the immoderate and very long Use of the summer and autumnal Fruits, and their Juices not duly fermented, or well depurated, especially that of Apples, which contains not
 only

only a very acid, but likewise a very austere Juice — However a proper and due Fermentation renders it a Drink truly pleasant and salutary. For by the continued and intestine Motion of Fermentation the gross tartareous Salts are very greatly comminuted, and at length rendered exceedingly subtile, and fitted to pass easily through the most minute Vessels of the Body — But as the Momentum of any Particle of Matter, striking on another, is as the Weight thereof and its Velocity conjunctly, these exceeding small Corpuscles are carried with very little Impetus, unless they are moved with exceeding great Velocity : Therefore when the Salts are reduced to a great Degree of Subtility they only gently irritate the Nerves and tickle them as it were, without the least Degree of Laceration — Besides this during the Fermentation the crude, oily Part of the new Cyder is greatly attenuated, and in a Manner sheaths up the tartareous Salt, so that at last it becomes a Kind of *Sal volatile oleosum* ; and thus the Liquor becomes a very grateful and sufficiently wholesome Drink.

There is scarce indeed a more excellent Remedy against an alkaline Acrimony than Cyder ; nor is there any Thing more useful, or pleasant, for scorbutical Sailors ; for it soon puts a Stop to their scorbutic Ulcers and quite cures the foetid Putridity of their Gums. I
have

have seen a great many, after long Voyages, covered over with very foul, ulcerous Eruptions, and almost eaten out with the Scurvy, perfectly recovered by the Use of Apples and Cyder only — And I make no Doubt but that a strong, generous Cyder would be a most wholesome Drink for the Sailors, that make Voyages to the *East*, or *West-Indies*; nay indeed a great many have already actually experienced the salutary Effects of it — Let me further add, that since Cyder hath been in so very great Use amongst us the Itch and foul leprous Eruptions, which formerly infested this maritime Country, *Cornwal* especially, to a very great Degree, have almost quite disappeared.

But the Nature and Course of this Work now requires that I should lay down the Method of Cure.

As to Bleeding, however necessary it may be in what they call a bilious Colic, and by *Sydenham* and others is justly recommended as the very first Thing to be done where the Pain is violent, the Pulse quick and strong and a feverish Heat demand it, lest some great Inflammation of the Bowels should come on, yet, in this Kind of Colic, which we have just now described, it is so far from being useful, that it is for the most Part pernicious: For the weak and slow Pulse, and the great Dejection of Spirits, Symptoms always attendant in this Disease,

Disease, scarce bear the Loss of any Blood; and much less require it — And even *Sydenham* himself, contrary to what he had advised in a bilious Colic, is not for Bleeding in a Colic occasioned by an immoderate Use of the Fruits of the Season (as Cherries, Apples, Plums, &c.) till he had given a Vomit, and an Anodyne — But indeed I cannot see to what Purpose Bleeding should be used then, unless too great a Quantity, Velocity, or Heat of the Blood had made it proper at the very Beginning, because the Exhibition of a Vomit to a Person very full of Blood is not very safe till after Bleeding.

I confess indeed, that, before I was thoroughly acquainted with the Nature of the Disease, I ordered some to be bled with a View to abate the excessive Violence of the Pain, but it was far from answering my End, for they almost all fell into very great Faintings. I tried also what it would do in the Pains of the Back and Limbs, but truly with no better Success; nay generally it proved of very ill Consequence, for almost all those, that were bled largely, were seized with paralytic Symptoms, and forthwith quite lost the Strength and Motion of their Hands, and did not recover the Use of them for a long Time — nay what is more lamentable several have not regained the Use of them even to this Time. Truly the smallest
Acci-

Accident, attending this Practice, was a long continuing hydropic Tumor of the Feet—In short therefore, if Bleeding is to be ordered at all, on Account of an abundant Quantity of Blood, it should be at the very Beginning of the Disease, and before Narcotics of any Kind are administered, for, not in this only, but in all Diseases, the Sick bear Bleeding before much easier than after the Use of Opium.

Though Bleeding was very seldom useful in this Disorder, Vomits were always advantageous, indeed in the Beginning absolutely necessary: For whether you gave Anodynes, or Cathartics, they were immediately thrown up again with a vast Quantity of exceedingly tenacious Phlegm, and neither abated the Pain, or produced a Stool, especially if given in a solid Form—I remember a *French* Apothecary consulted me for a certain Painter's Wife, to whom he had given (but at different Doses) ʒij. of Pilul. ex Duobus with ʒss. of Calomel, and had washed down all with a large Quantity of a strong purging Infusion—But what was the Effect? She vomited indeed, though not much, but it had no Manner of Operation by Stool. I forthwith ordered a Vomit, and that it should be washed off as usual with an Infusion of Sage and Chamomile-Flowers; with this she brought up an immense Quantity of extremely tough, mucous Matter, with the very
Pills

Pills scarce at all changed; though they had been taken for many Hours before.

Here it falls in my Way to take Notice of the Error of some, who give resinous Cathartics without the Admixture of any saline Body, or the Yolk of an Egg, which may dissolve the Resin in the Bowels. For if you give the mere Resin of Jalap, or Scammony, to any one, that abounds with pituitous, watery Humours in the first Passages, it will not more purge them than if you had given mere Dust of the Street; and the Drinking large Quantities of Water-Gruel, which is commonly done to promote the Operation, is so far from producing the Effect, that it quite hinders it.—Therefore all-provident Nature hath furnished us with the resinous Plants admirably well adapted to our Use, by combining a due Quantity of native solvent Salt with the Resin, which the ill-timed Labour of the Chemist idly destroys by extracting merely the resinous Parts.

But to return to my Subject—To those, that labour under this Disorder, I first of all prescribe a Vomit in this Manner :

R Rad. Ipecacuanh. ʒi. vel ʒiss. Sal. Absynth. ʒss. coq. ex Aq. fontan. ʒiv. ad ʒij. dein coletur Decoctum, cui adde Aq. Flor. Chamæm. C. Syrup. è Spin. Cervin. ā ʒss. m. f. Potio emetica.—To promote the Operation of the Vomit I order a Quantity of Chicken-Broth,

Broth, or, which I more approve of, an Infusion of Sage and Chamomile-Flowers, to be drank freely.

This emetic Potion seems to me the most gentle in its Operation of any I have ever tried, and yet very certain and very cleansing; for it very soon excites a Vomiting, and doth not stay long in the Stomach to create Gripes, which the Ipecacuanha in Powder very often doth—if I have a Mind to make it considerably stronger I add too it a few Grains of Emetic-Tartar, or a Spoonful or two of the Vinum benedictum.

A Vomit is thus to be administered every other Day, sometimes even to the fourth Time, for whilst the Stomach is overloaded with a vast Quantity of most tenacious Phlegm, and oppressed with a great Deal of corrupt Bile, what Good can be expected from Medicine unless these are duly carried off? Which is much easier done upwards than downwards; for, supposing they could be carried away by Stool, is it not a much easier Way to throw off this Saburra directly from the Stomach by the Mouth than downwards through the whole Contour of the Intestines? Besides when this putrid Colluvies of the Stomach is forced down through the Guts, the thinner Part of it absorbed by the Mouths of the lacteal Vessels will enter into the Mass of Blood and pollute it,
and

and the more gross Part sticking in the Plicæ of the Intestines excites very severe griping Pains: But, if the whole Quantity of the offending Matter could be purged off that Way, it must necessarily in its Descent very greatly vellicate the nervous Coat of the Intestines. It is certainly therefore very improper to attempt to carry off the Load and Filth of the Stomach through the Anus.

Nor is Vomiting only useful in this Disease, as it scours and cleanses the Stomach, but by its Action also all the Parts, that lie near the Stomach, are squeez'd and shook greatly; so that whatever Humour had been stagnant in the Liver, or Pancreas, is pressed out, and forthwith thrown up by Vomiting. But as all the Humours of the Body by Stagnation corrupt, and contract a greater and greater Degree of Acrimony, if this Colluvies was to be carried downwards by violently stimulating the Guts, and passing into the Vasa Lactea, it would be productive of a great many Evils. By Vomiting therefore the Bile, whether porraceous, or black, both exceeding frequent in this Disorder, is most usefully pumped up and discharged.—Nay I have moreover often known the Pains of the Limbs and Shoulders cease, for a Time at least, after the Action of the Vomit; agreeable to the Doctrine of the great *Hippocrates*, Lib. ii. Prædictor. which *Celsus*

Lib. ii. cap. 8. thus renders, “Humerorum
 “Dolores, qui ad Scapulas, vel Manus, ten-
 “dunt, Vomitu atræ Bilis solvuntur.”

When the Operation of the Emetic is quite over, and the Vomiting ceases, which is soon effected by giving a Paregoric, purging Medicines should be soon given, to which Anodynes are very properly added ; for not only a great Costiveness, but also violent Pains in the Bowels are constant Symptoms in this Disorder—When the colical Pain rages very much therefore Opiates ought to be added to the Purgatives, that the Pain may be rendered sufferable, that a Relaxation of the Intestines may follow, and that their peristaltic Motion may be carried on constant and regular, neither interrupted, or perverted.—All Pain acts as a Stimulus, or more properly the Stimulus excites the Sensation of Pain, but the Stimulus urges the Fibres to contract, and if it is violent brings on spasmodic Constrictions. Therefore when the colic Pain is extremely vehement the Intestines are convulsed in some Places, and as it were knotted up, so that, till the Torment is allayed, neither Wind or Stool can pass through them ; and for this Reason violent colical Pains are generally attended with a very costive Belly : And, when this is the Case, Anodynes are very rightly mixed with the Purgatives : Nor is this indeed

indeed a new Practice, for *Riverius*, a Physician of very great Experience, in his Chapter on colical Pains, prescribes Aloes ʒi, Scammony gr. vi, to which he adds gr. ij, of Laudanum Opiatum; nay in the first Observation of his 2d Century, he adds gr. v. Laudan.— But, when he thinks he doth it on the Authority of *Hippocrates*, in my Opinion he is mistaken; for the Word Μηκωνίς, in the Place cited by *Riverius*, doth not signify the hypnoric Juice of the Poppy (nor perhaps of any Kind of Poppy, except that possibly of the Μηκων ἀφρώδης of *Dioscorides*, which indeed purges sufficiently violent) but Πέπλον, or Πέπωλιον *, to wit, a Kind of purging Medicine; and the same Thing is meant by Μηκωνίον, which occurs very often in *Hippocrates*, in that Sense (except when the Epithet ὑπνωτικόν is joined to it, as Lib. ii. de Morb. Mulier. p. 670. Edit. Foëssii) so also Μηκωνίς, or Μηκωνίτις, is explained by *Galen* in his Exegeſis of the Words used by *Hippocrates*, Μηκωνίον τὸν Πέπλον καλέμενον· οὗ καὶ Μηκωνίτην ὀνομάζει.

But to return from whence I digressed—After the Vomit I commonly give as follows;
℞ Pil. Coch. min. ʒi. vel. ʒfs. Calomelan. ʒfs.
Laudan. solid. gr. i. Ol. Caryoph. gutt. i. m.
f. Pilul. or thus, ℞ Rad. Jalap. ʒi. vel ʒfs.

T 2

Spec.

* Πέπλος καὶ Πέπλιον ἐγγυλάτω, μὴ τὴν ἰδίαν ἀλλήλων ἐς τὸ παθεῖν· *Ruf. Ephes.*

Spec. Diamb. gr. viij. Calomel. ℥ss. Syrup. de Spin. Cervin. q. s. m. f. Bolus.—The Pills however are not so easily vomited up as the Bolus—About two, or three, Hours after one or other of these Things are swallowed, I order an Infusion of Sena, or a Solution of Manna, or the like purgative Medicines to be taken, to which I sometimes add Oil of Almonds or Olives, unless Oil is very disagreeable to the Stomach. I increase and repeat the Dose of these Medicines as Symptoms may require. By these the Pain is abated, the Intestines are relaxed, though gently stimulated to Stools, and lubricated by the oily Medicines—But, even if thus no Stools are produced, I order the whole Abdomen to be fomented with an emollient Foment, and that especially if the Belly is very hard and tense, or very greatly contracted by a Spasm. For this penetrates the Integuments of the Abdomen with its soft Vapour, and soothes the Pains of the Intestines; this softens the too tense Fibres, and relaxes them. I have often noted a very surprising Success from an Application of the following Fomentation; ℞ Rad. Althææ, Sem. Lini, Sem. Fœnugræc. ana ℥ij. Flor. Chamæmel. M.ij. Capit. Papav. alb. ℥iv. coq. ex Lact. dulc. & Aq. fontan. ana P. æqual.—But much more happy Effects are to be expected if the sick Person would sit in a Semicupium (or

Half-Bath) prepared with such Ingredients. Whoever hath seen the very happy Effects of a warm emollient Bath in nephritic Paroxysms, will easily credit what I say on this Occasion.

In Truth I have frequently seen a most violent nephritic Fit removed as it were in a Minute by the sole Use of the Bath, when neither Bleeding in large Quantities, nor repeated Doses of Laudanum, had availed any Thing. And I have learnt by long Experience, that nothing will so effectually remove nephritic Pains, and facilitate the Passage of a Stone through the Ureter, as a warm emollient Bath.

But it very often happens, in this Kind of Colic, that the Excrements are very greatly indurated, and stick in the Valves of the Colon, and there stop the Passage of every Thing, both Wind and Stool, and from this Cause only very often arise excessively violent Pains, especially when the Guts are irritated by Purgatives. Wherefore if no Stools follow in some few Hours after the Exhibition of the Cathartic, I order an oily emollient Clyster to be thrown up to lubricate the Intestines, and soften the Excrements; and soon after, if necessary, I direct a more acrid Clyster.

If any Species of Disease requires frequent Purging, this, of which I am treating, doth so in a particular Manner, and the Belly must be kept open continually for some Time by pro-

per Laxatives, such as Rhubarb, Pil. Ruff, Tinct. Sacr. with which a few Grains of Calomel should be also now and then given: A little fine Turpentine dissolved with the Yolk of an Egg, and mixed with some Cordial-Water, is a useful Purgative, and very effectual against the rheumatic Pains that accompany the Colic. In the mean Time Anodynes are to be given freely to take off the excessive Pains, which are vastly apt to return, unless you prevent it by giving repeated Doses of Opiates—The Quantity of the Opiate cannot however be absolutely ascertained, for as much as this very same Dose will cast one into a profound Sleep, that will only produce an agreeable Reverie in another.

This long and frequent Purging-Course, however new it may seem, was by Experience found necessary, for otherwise the Belly would be soon very much bound up again, and most severe griping Pains would most certainly soon succeed, on Account of the sharp Humours continually falling on the Guts.

It was not only necessary, in order to carry off this Disease, to cleanse the first Passages very well, but the saline Acrimony of the Blood was also to be washed off, for from a polluted Fountain we cannot expect pure Streams.

The Sick should therefore very freely use diluting Liquors, amongst which

ἀπλόν μὲν
ἴδιον

Redup ; for there is no other Solvent of Salts but Water, nor is there any Thing more pure and incorrupt.—But of all Kind of Waters I would chiefly recommend *Pymont*, or *Spaw-Water* ; for these, being impregnated with a *Chalybeate* Principle, not only admirably well dissolve the Salts, but also strengthen the Crasis of the Blood, and corroborate the Fibres.

When the Blood hath been sufficiently saturated with Diluents, we should endeavour by all Means to promote Sweat : But I have never experienced any Thing more effectual in this Intention than Camphire, and that most beneficent Gift of Heaven to the Miserable, Opium, or Laudanum ; to promote the Sweating with these Medicines the Sick should drink largely of an Infusion of Sage, or Rosemary, warm, or what is probably more agreeable to the Stomach thin warm Wine-Whey,

Whoever had well considered the Consent between the Intestines and the Skin, and noted the foetid acrid Sweats so sharp as even to erode the Skin, would not be very much surprized to see both the Colic and Rheumatic Pains taken almost quite off by the Sweating, for a Time at least—This Practice was following the Steps of Nature, which a prudent Physician should always tread in, for very frequently spontaneous Sweats very greatly relieved this Disorder. Exactly agreeable to this

is the Aphorism of *Baglivi*, Capit. de Colic.
 “ Colica habitualis & endemica, à Vino acido
 “ præsertim oriunda, solis sanatur Sudorife-
 “ ris; Vesperi tamen interposito anodyno Re-
 “ medio.”—But I am surprized that this very
 same *Baglivi*, in the very same Section, should
 blame the Use of Opium in the Colic: For
 whether it doth, or doth not provoke Sweats
 in a violent Colic, it is certainly highly neces-
 sary, and vastly to be preferred to the Powder
 of wild Fig-leaves, even although it should
 grow out of the Earth (which is a Matter of
 high Import I will warrant you) and not out of
 a Wall, and though it should be cautiously
 mixed (as he cautiously advises) with the
 Leaves of the Elm-Tree.—But quandoque
 bonus dormitat Homerus.—The profuse Sweats
 indeed are not the Cause of the Palsy but the
 Effect: For, when there is a Metastasis of the
 morbid Matter on the Genus nervosum, the
 Nerves cannot but be convulsed, or rendered
 paralytic—So that, the subcutaneous Nerves
 being much relaxed, the Sweat flows off in A-
 bundance through the too open and gaping
 Pores of the Skin (which happens to dying
 Persons from the same Cause) and it should be
 noted also, that the Sweats continue a long
 Time after the Palsy comes on:—I really think
 the Corpus Reticulare Malpighii (or of Pro-
 fessor

feffor *Ruyfch* rather) is designed by Nature, as a Kind of universal Sphincter-Muscle to the sudoriferous Ducts, that pass through the Meshes of that Net-work, and when more strongly constringed than ordinary (which happens when the Skin is exposed to the Cold-Air) the whole Skin becomes corrugated; and full of little Pustules as it were, like Goose-Skin; but when too much relaxed it is greatly bedewed with Sweat.—But these Objections against the Doctrine of *Baglivi* are sufficient.

After Sweating, Diluents are still to be continued, especially some Sort of Chalybeate Water, if that is not at Hand the purest you can get; and let it be drank for a long Time, that some pure Matter (or Liquor) may be added to that which is already corrupted, that the Blood may be kept in a due State of Fluidity, and that the acrimonious Salts may be dissolved, and washed off. But in the mean Time such Things as help a weak Stomach, and strengthen the Viscera, should not be omitted, interposing withal every now and then Rhu-barb and Tinct. Sacra (which have both the useful Powers of corroborating the Intestines, and properly purging them) and this in Order to prevent a fresh Collection of sharp Humours within them.—And the testaceous Powders also may be of some Use in this Disorder, as they

they absorb acrid Humours; but, unless you add some fixed alkalious Salt to them, and frequently exhibit Rhubarb, or some gentle Purgative, their Use is not long to be continued, lest, by remaining long in the Guts, they should concrete into almost a stony Hardness. Which indeed I have more than once observed, particularly in a Gold-Smith's Child, in whom, after a long Continuance of testaceous Powders, the Excrements became so vastly indurated, that they resembled Plaister of *Paris*, and it was necessary to pick them out of the Anus with an Instrument.—This Admonition, with Respect to testaceous Powders, should be always observed, unless when the Belly is very loose. It is safer therefore, and much more efficacious, to give a thin Lime-Water to correct acid Humours, especially when duly impregnated with some proper Stomachics, as it corrects the Acid, not only in the primæ Viæ, but also in the Blood.

The most useful Medicines I experienced, in removing the rheumatic Pains of the Limbs, were Cinnabar, Gum Guaiac. Tincture of Antimony, and Potions composed of Turpentine, or Balf. Copayba, which are likewise effectual against the paralytic Affections.—But, above every Thing else, small Doses of Calomel,

mel, frequently repeated, which, when it is sublimed 8, or 10, Times, makes a most noble Medicine in very many Disorders: This our very learned *Musgrave*, ὁ μακρίτης, who was an Honour to our Profession whilst he lived, used to prescribe to the Quantity of two, or three, Grains only—To the Calomel I frequently join a little Camphire, which, consisting of highly subtile Particles, by penetrating the most exceeding small Vessels of the Body, and adding Wings as it were to the Mercury, greatly adds to its Power—Moreover the Camphire corrects the corrosive Quality of Mercurials, and blunts their Spicula: Which *Dr. Bates* knew long since by adding it to Turbith Mineral; in the Preparation of, what he calls, *Mercurius præcipitatus griseus*. —I have also lately experienced the good Effects of *Mercurius alkalifatus* in such Cases.

But further against these exceedingly tormenting rheumatic Pains, and which continue a long Time fixed between the Shoulders, I found nothing more serviceable than Blisters, which also are very useful in preventing, as well carrying off, the paralytic Symptoms, if they are already come on.

The paralytic Limbs and whole Spine, from the Head to the Os Coccygis, should be well anointed with the Galbanetum of *Paracelsus*

fus (which you have described in *Crato* and *Riverius*) or, which I think better, the Galbanetum of *Hartman*, with the Addition of a little Camphire: For this is very penetrating and opening. This is also a very useful Remedy when the Abdomen is either vehemently distended with Wind, or greatly contracted by Spasm: The whole Belly should be anointed with it after a proper Fomentation. But, let it be noted, this Galbanetum is much better prepared by a close and long Digestion than by Distillation; (as is commonly done) for when distilled it is more caustic, and sometimes corrodes the Skin, if very tender, especially. But if it should happen that the Navel is excoriated, it is very difficultly cured, and gives vast Pain; and therefore truly this should be well guarded against when we apply Plaisters of Galbanum, or Hysteric-Plaisters (as they are called) to the Middle of the Abdomen, by covering over the Navel with a small Piece of Silk doubled.

When the colical and rheumatic Pains cease a little, the Patient may be more freely nourished, but not with Meat that is flatulent, or hard of Digestion, lest it hurt the Bowels, which are still tender: The most proper Things are Sago, Gelly of Hartshorn, or, which is more easily procured, Gelly of Calves-Feet, poached Eggs,

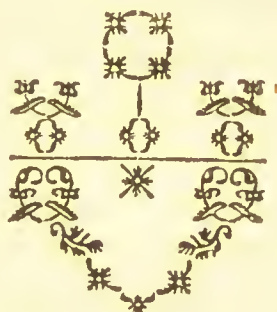
Eggs, Panado, and such-like Nutriment; which may be continued through the whole Course of the Disease, little at a Time but often—For Drink, nothing should be given but pure Water, or some proper Chalybeate Water, to which may be added every now and then a little generous White-Wine; but every Thing that is very windy, or acid, is very hurtful in this Disease, and greatly to be avoided; for it is very apt to return by the very smallest Error in Diet—Some Chalybeate Stomachics also are very properly used to restore the Crasis of the Blood, and strengthen the Viscera. I most commonly use the following Infusion, R Radic. Gentian—Galang. ana ℥ss.—Zedoar.—Calam. aromat. Cort. extern. Aurant. Hispalens. sicc. ana ℥iiss. Caryoph. Indic. ℥ii. Chalyb. cum Tartaro ppt. ℥iii:—Hisce affunde Vini alb. Olyssiponenfis lbiiiss. Aq. Absinth. Comp. lbiss. f. Infusio clausa per Dies saltem duodecim, in Vase vitreo, id sæpiùs agitando.—When the Viscera are infirm, and a watery Colluvies abounds, this is a very useful Medicine, and not disagreeable to the Stomach.—The Seeds of Carduus in *Lower's* bitter Chalybeate Tincture give a very loathsome slimy Taste; nor is any Thing of Gentian, besides the Name, in the Aqua Gentiana Composita, which makes Part of *Lower's* bitter Chalybeate Tincture.

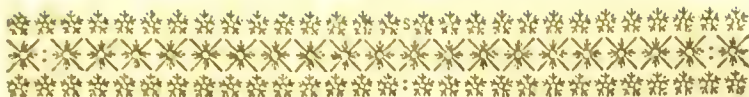
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The last Thing I recommend in the Cure of this Disease is Riding on Horse-back, for there is nothing that more effectually strengthens the Viscera and Intestines, inasmuch as this Kind of Exercise, by the very various Motion and continual Succussion of the Body, gently shakes the whole Abdomen; so that whatever sticks in the Intestines by the perpetual Pressure and Agitation is carried down, whatever Lensor stagnates in the Blood-Vessels is expressed, and the Motion of the Blood through the Mesenteric Vessels and Branches of the Vena Porta, where the Circulation is naturally exceedingly slow, is very greatly promoted: So that the Blood, partly from the morbid Matter, and partly by its Stagnation in these Vessels, being almost concreted, is dissolved again by this concussion as it were: And therefore it opens Obstructions in the Glands of the, Liver, Pancreas, Mesentery, and Intestines and assists the Action of the Spleen, which is subservient to the Liver.—Lastly it appears by many Experiments that Perspiration is greatly increased by Riding, so that by drawing forth the Humours from the internal Parts, and passing them off through the Pores of the Skin, it is not only useful in this Disease, but in almost all chronic Disorders—Indeed those, who have with Difficulty rubbed through a Disease
therefore

by a tedious Course of Medicine, Riding most effectually and perfectly recovers. As soon therefore as the Sick can well sit on Horseback, let him enjoy that Exercise daily—Viresque acquirat eundo.

These few Things, I have here delivered, of the Method of curing the *Devonshire* Colic, may perhaps be properly enough applied to the Cure of what is called the Colica Pictonum, which Kind of Disease is very common in the *West-Indies*: And, arising from a similar Cause, to wit, too great a Use of the very acid Juice of Lemons, requires much the same Method of Cure.





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O F T H E

Principal MATTERS and the NAMES of
AUTHORS contained in this VOLUME.

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E R R A T A.

PREFACE.—Page x, Line 19, read, instead of *contiguous*, *continuous*, or *continued Canals*. Page xxxiv, Line 26, read, *derived from the Hebrew Word Cûr, Cold*.

In the Book.—Page 35, Line 17, read, *I scarce remember more obstinate Torments in them*. Page 75, after *αἱ εἰς τὰ Σκελετα*, add *&c.* Ibid. Line 21, read, *Swelling of the Legs*. Page 150, Line 21, read, *Circius Gallicus*. Page 159, Line penultim. read, *Rheumatisms and Catarrhs*.

In the Dissertation on the Colic.—Page 27, Line 4, read *Juice of Leeks*. Page 42, Line 14, read, *for as much as the very same Dose, &c.* Page 47, Line 25, read, *as well as carrying off*. Page 50, Line 19, read, *Conquassation*, Ibid. Line ult. blot out *therefore*.

OBSERVATIONS

ON THE

AIR

AND

EPIDEMIC DISEASES.

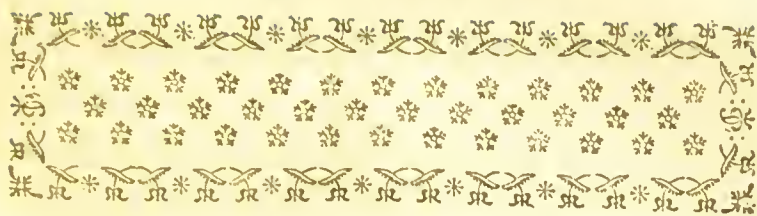
PART II.

From the Year 1738 to 1748 inclusive.

TRANSLATED

From the LATIN Original.

A



T H E

P R E F A C E.

I HAVE at length finished another Volume of my Observations *de Aëre, et Morbis Epidemicis*, (*viz.* from the Beginning of the Year 1738 to the End of the Year 1748) in which I have made Use of the same Plan, and Annotations, as those taken Notice of in the * former Volume. How very laborious such Works are, he only is capable of knowing, who has himself been concerned in them.—Indeed I the more willingly engaged in this Second Volume, both because of the favourable Reception which the first met with, and from its being useful to myself, even whilst I was carrying it

* I have besides, in this second Volume, taken Notice in every Month of the Day of the New and Full Moon.—I shall here also by the Bye observe, that the whole Quantity of Rain, which fell in the Year 1737, (Vol. I.) was
Dig. Dec. D g. Dec.
only 27.364, and not, as it is erroneously printed, 36.706.

VOL. II.

B

into

into Execution. — For, whilst I diligently remarked the Changes of the Air and Weather, and also the different Diseases ensuing from thence, I was much more capable of discovering their true Nature and Origin; since, as † *Hippocrates* long since observed, and which is likewise sufficiently attested by Experience, as the Seasons themselves are, such also are the Constitutions of the Diseases. Hence it is, that this divine Ancient is so attentive in laying down a diligent Observation of the Air and Seasons, and has moreover given us some of the best Instances in this Case, especially in his first and third Books of Epidemics.

Another Inducement to this Undertaking was, that Observations of this Kind, when regularly made for a long Series of Years, in one and the same Place, more certainly discover the Constitution of the Atmosphere in that Country, the reigning Disorders, their Successions, Relations one to another, and even the very Method of Cure, than if there was only an History to be given of them for one or two Years. Upon this Account the very celebrated ‡ *Ramazzini* observes most justly, “ That
 “ nothing would be more useful in Physic than
 “ to compare together the successive Constitu-
 “ tions of the Air, in Order thereby to fix

† In his Book de Humorib. Sect. 7.

‡ Confit. Epidemic. urban. 1691, ipso Initio.

“ upon a right Method of Cure, as often as
 “ the same Kind of Seasons and the same Dis-
 “ orders should return.”—The most experien-
 ced *Hoffman* goes even yet somewhat further,
 when he most “ earnestly exhorts all judicious
 “ Physicians, and every one of them, who
 “ have any Regard or Concern for the Health
 “ of Mankind, that, in setting down the His-
 “ tories of Diseases, if any epidemic Diseases
 “ reign, to be exceedingly diligent and accu-
 “ rate therein ; and that every one may set
 “ down the Constitution of the preceding as
 “ well as the present Seasons, and the Weather
 “ in his particular Situation, adding also the
 “ Motion of the Mercury in the Barometer,
 “ and Degree of Heat in the Thermometer ;
 “ and exhibit a full and compleat History
 “ thereof, together with the Method and
 “ Event of their Cure *.”

Indeed the common Air is of all Things the most absolutely necessary to the Preservation of our Lives, since we can sustain the Want of other Things even for several Hours ; whereas we cannot be without this for the shortest Time. —Whether therefore this be pure, or impure, is doubtless a Matter of the utmost Importance, and a Physician ought to be perfectly acquaint-

* Fred. Hoffman. Medicin. rational. Systemat. Edit. Francofurt, 4^o, 9 Vol. 1738, Patholog. general. Part. 3. Cap. 7, P. 480, Tom. ii.

ed both with its good and bad Qualities †. By the Word *Air*, I would have understood the Earth's Atmosphere, and not, as it is sometimes called, the mere Element ; which, as it is compounded of very different Kinds of Things, is capable either of being pernicious or salutary to us in various Ways. Its different Constitutions therefore, as to the Preservation of Health, as also the Prevention of Diseases, are constantly to be observed.

To illustrate this by an Example : — Very dry and cold Weather, accompanied with north-easterly or northerly Winds, constringes the Habit of the Body, strengthens the Fibres, contracts the smaller Vessels, and braces them up, renders the Humours thicker, accumulates moreover the Globules of the Blood, and greatly compresses them, and, in the Words of *Celsus*, “ Totum Corpus spissat, & mobilius “ atque expeditius reddit :” For this Reason, according to the Opinion of ‡ *Hippocrates*, of all the Winds, the most healthy is a northerly. — Should however such a Season as this continue longer, the Solids would become exceedingly braced, and too elastic ; the Fluids would be too dense and glutinous, and infi-

† I have said several Things about this in the Preface to Vol. I, *de Aere*, &c.

‡ Lib. de Morbo Sacro. Sect. 15, Edit. Vander Linden, Lugdun, Batav. 2 Vol. Oct. 1665.

nately less capable of passing the very smallest Vessels ; since this not only produces a Lensor, which is very apt to occasion Inflammations, but moreover it so condenses the red Globules of Blood, that it is with the greatest Difficulty that they can be conveyed through the extreme and minute Ramifications of the Arteries, already too much contracted, and at the same Time not easily changing their globular Form into an oblong, in Order to facilitate their Passage : For at this Time the smaller Arteries themselves are constringed by the Cold, and very greatly resist any Distension. — Hence arise Obstructions, Inflammations, Pleurifies, Peripneumonies, Anginas, Rheumatisms, and, in short, whatever Disorders are occasioned by a thick, viscid, and inflamed State of the Blood, forced forward by too great an Impulse of the Heart and its Arteries : Because the more the Vessels are contracted by the Cold, and the more they are compressed by the Weight of the Atmosphere ; so much greater, *ceteris paribus*, is the Velocity with which the contained Humours move ; from whence the Friction, and consequently the Heat, becomes so much the greater ; which at length very greatly thickens and condenses the Blood. — All these Things are certain and constant ; since whatever Blood is drawn during this Constitution of the Air, although it should be from the most healthy,

it would be very dense, and commonly glutinous; much more so then where a Fever is joined to it. Nevertheless this morbid Lensor is not produced immediately, nor in all Persons; since it arises gradually, and after a long Continuance of a dry Season and a northerly Wind; nor does it only signify what Sort of Days the present may be, but also of what Kind the preceding ones were.—Notwithstanding, to People of a too-relaxed and phlegmatic Constitution, this Constitution of the Air is so far from being pernicious, that it is very beneficial, as it renders them stronger and more alert; one Constitution being (as our very best * Præceptor remarks) better in Summer, and another in Winter.—From hence it is observable, also, that one Kind of epidemic Fever proves fatal to such Persons as are strong and robust, and at the same Time spares the weak and delicate; whereas another, generated by a very moist and warm Air, makes most terrible Havock amongst them. — Accordingly, from great Alterations in the Atmosphere, the popular Disorder is either very greatly changed, or altogether stopped; as we often see to be the Case. To guard however against, and even to remove the evil Consequences of a dry and cold Season, we should freely use diluting, emollient, and warm Liquors, as well as a soft,

* Hippocrat. Aphorism 2. Sect. 3.

relaxing

relaxing Diet ; nor should we ever venture to go abroad, whether on Foot or Horseback, and face these northerly Winds, before a Person has taken in some warm Suppings : But, should any one from thence be seized with Shiverings, or be feverish, Blood must be immediately drawn, more especially if a Pain in the Breast or Side should attack him ; and this is to be repeated again, should the Fever become heightened.—Indeed this is always certain, that Bleeding is never safer, or more advantageous, in acute Diseases, than in a dry and cold Constitution of the Air, when the Barometer stands high : Nor is this only convenient in pleuritic and peripneumonic Disorders, but likewise in several others, as in the *Small-pox*, the *Measles*, *Rheumatisms*, *Colic*, &c.—Nay, Bleeding is then very proper in intermitting Fevers themselves, such as Quotidians and Tertians, at least in the Beginning ; since, otherwise, these are easily and frequently converted into those, which are continual, ardent, and inflammatory.

On the contrary, a moist, warm *κατάσσεις* of the Atmosphere relaxes the Fibres too much, enervates the Power of the Vessels, renders the Blood of too loose a Texture, too glutinous and inert, and makes the whole Body dull, unstrung, and languid, and exposed to long, slow, putrid, intermitting Fevers.—Here then a

quite different Regimen and Course of Medicine is to be used ; since such are indicated in this Case as may brace up the Solids of the Body, preserve the *Crafs* of the Fluids, and make the Globules of the Blood more compact ; austere, cold, and generous Kinds of Liquors, a stronger, absorbent, and astringent Sort of Diet, the Cold-Bath, and other Things of a similar Nature. — In such Fevers as those, Drawing of Blood, especially if it be largely, is so far from doing any Good, that it does a great deal of Hurt ; since these very Fevers are owing to a too great Diminution of the Power of the Heart and Arteries, a too loose Texture of the Blood, and a Stagnation of the Lymph : Hence the vital Fluid tends to a *Στάσις* and Corruption ; from which arise intermittent, slow, putrid, malignant Fevers ; to the Cure of which, strengthening, and not weakening Medicines are necessary. — But very often indeed, whilst such Kind of Weather lasts, Quotidians and Tertians are apt to degenerate into long, continual, putrid Fevers, and that to the no small Danger of the Sick ; who, if they happen to recover from them, generally fall in the Conclusion into a Jaundice or Dropsy. — The sick Persons indeed never recover sooner, or more happily, than in fair, bright Weather, and when the Mercury stands high in the Barometer. This I have myself constantly observed,

observed, and the very famous *Fred. Hoffman* (long conversant in the Practice of Physic) remarked the same long since; whereas, when a cloudy, rainy, southerly Wind blows, they recover exceeding slowly.

Moreover, a cold, humid Constitution of the Atmosphere is likewise so far from being healthy, that it proves pernicious in several Respects, but chiefly by insinuating its cold Humours into the human Body, and very considerably obstructing the *Perspiration* *.—At this Time People must put on warm Cloathing, keep good Fires, and, by a proper Regimen in Living, guard (as much as possible) against the cold Vapours; in short, Perspiration is by all Means to be promoted, to which Purpose frequent Friction of the whole Body by the Fire-Side, constant, daily, and even an increased Degree of † Exercise greatly contributes.—In this Manner are we always to fence against the particular Indisposition of the Weather.

What has been already said upon this Subject may more strongly be elucidated from con-

* Even a few passing Clouds, in a very warm Constitution of the Atmosphere, do very considerably obstruct the Perspiration. See *Observat. accuratiss. Joh. Lining. M. D. Philosoph Transact. N^o. 470.*

† How greatly this promotes Perspiration you may see in those very curious Experiments of *George Rye, Esq*; in his *Medicinâ staticâ Hybernicâ*, added in the End of the learned *Dr. Rogers's* Book de Morbis Epidemicis.

sidering

sidering of *Endemic* Diseases ; for the greater Part of these arise from the particular Depuration of the Atmosphere, in whatever Place they are troublesome : Thus, for Instance, slow, putrid, intermittent, irregular Fevers, which yield to no Remedies unless a Change of Place, or a thorough Change in the Atmosphere, which, as in that Place it abounds always with humid, noxious Vapours, which destroy the Tone of the Fibres, check Perspiration, and vitiate the Humours, are found to be most rife in low, marshy, swampy Situations.—Hence it is, that if any Stranger tarries long in boggy Places, and is exposed to a thick Air, within a very few Days he certainly falls sick ;—since, if the retained Matter of Perspiration is not soon discharged, either by Stool or Urine, nor yet through the Pores of the Skin, it presently produces a greater or less Degree of a * Fever ; and that becomes so much the more heightened, in Proportion as the Quantity of the retained *Perspirabile* is the greater, and the Quality of it the more acrid †. In Summer, therefore, or in Autumn, when the Humours are by the great Heat rendered much more acrid, an obstructed *Perspiration* is exceedingly pernicious.

* Sanctorii Aphorism. 11, Lib. 1.

† ——— 46, *ibid.* ——— 35, Sect. 2.

On the other Hand, those Persons who inhabit dry, mountainous Places, with a north-east Aspect, are very much afflicted with inflammatory Fevers, Pleurifies, Peripneumonies, and † Anginas ; which I have frequently observed to be very common in higher, cold Situations, facing the North, when any Disorder, that affected the Breast, was very rare in the Valleys. — Nay, I have frequently seen a *catarrhal, epidemic* Fever, in very cold and mountainous Situations, to assume the Nature of a *Pleuro-peripneumony* ; whereas, in very low Situations, the same has run into a slow, or (as it is termed) a *nervous* Fever. — From hence the Reason is sufficiently apparent, why, when there is one and the same popular Disease reigning in different Places, a quite different Method of Cure is to be recommended.

In these Cases, moreover, there is a great deal depending upon the Nature of the Winds, which produce very considerable Alterations in the Atmosphere : Thus a north-easterly Wind renders it dry, cold, and heavy ; whereas a southerly, moist, thin, and warm ; by which Means they have a very powerful Effect in making Places either healthy or unhealthy ; and the Inhabitants of them are affected in a quite

† See Ray's Travels through the Low Countries, in Harris's Collection of Voyages, Vol. II, Book 2, chap. 3, p. 656.

different Manner, according as the Wind is in this Point or the other.—Those Persons therefore, who cannot bear dry, cold Weather, ought to relax and warm their Bodies with warm Suppings now and then ; whereas those who are incommoded by a damp, humid Disposition of the Air should have Recourse to Astringents ; always guarding against any particular Inclemency of the Weather by Diet, a proper Regimen, and Physick.—Nor is this all ; since every one should defend himself (as much as possible) against noxious Winds, by building their Houses in such a Manner as to expose them the least that may be to unwholesome Blasts.—* *M. T. Varro* guarded against the Plague, which once raged in *Corfica*, by shutting those of his Windows which faced the South, and opening those towards the North.—Indeed the Care of the Ancients, both in building their Houses and in laying out their Towns, so as most effectually to secure the Health of the Inhabitants, was remarkably great ; since they were at the Pains to inspect the very *Viscera* of the Animals themselves, which had pastured in those Places where they intended to build, and by that Means to investigate whether those Places were healthy, or unhealthy. Thus solicitous were they for the Welfare of the Inha-

* *Varro Lib. 1. Cap. 4*, among the *Scriptores de Re Rusticâ*, ex Edition. Gesneri, Lipsiæ 1735, 2 Vol. 4to.

bitants, by consulting every probable Method for preserving their Health *.—But at present, and in our modern Edifices, far more Attention is paid to Gain and mercantile Advantages, than to the Healthiness of the Situation—Of which it may with the greatest Truth be said, as † *Vitruvius* formerly did of *Mitylene*, “Auster
 “ cum flat, Homines ægrotant, cum Corus,
 “ tussunt, cum Septentrio, restituuntur in Sani-
 “ tatem, sed in Angiportis & Plateis non pos-
 “ sunt consistere propter Vehementiam Frigo-
 “ ris.” Indeed several of our Houses are situ-
 ated in such swampy, low Bottoms, that they
 are always productive of Disorders; and, for
 that Reason, I would recommend to the Pos-
 sessors of them the celebrated ‡ *Varro*’s Advice,
 “ Ea vendant quot Assibus possint, aut, si ne-
 “ queant, relinquunt.”

This however by the Bye; if any Person is desirous of seeing more upon the Situation of Places, let him consult the great *Hippocrates*’s Writings *de Aëre, Aquis, & Locis*; and also his second Book *de Diætâ*, in which there are a great Number of Things concerning the Nature of the different Winds, very deserving his Perusal.

However altho’ some *epidemic* Fevers owe

* *Vitruvius*. Edit. Philandri 4to. Lib. 1, Cap. 4.

† ——— ——— Id. Lib. Cap. 6.

‡ *Varro de Re Rusticâ*, Lib. 1, Cap. 12.

their Rise to Contagion, yet the far greater Part of them proceed from an evident Intemperature of the Air; since no Cause of any reigning Disorder, that is more probable, can be assigned, than the Air itself, which is common to all—When an humid, warm Constitution of the Atmosphere has continued for a long Time, slow, putrid, malignant Fevers always spread themselves, as the whole School of Physicians have observed from remotest Antiquity, even to the present Times; nor do such Diseases cease, unless there is a thorough Alteration in the Temperature of the Air; which very often in a very short Time suppresses even those Disorders which are contagious.—Nay, a dry, cold Winter often puts a Stop to the Plague itself: Whereas it too frequently is very much heightened by a moist, warm Air—Indeed, I have myself several Times known putrid, malignant Fevers, which have been both as to the Violence as well as Number greatly aggravated in an hot, cloudy Atmosphere, of a sudden almost removed by the Blowing of a dry northeasterly Wind—Even Tempests themselves very frequently prove salutary, by dissipating the *Miasmata*; stagnant Air, no less than stagnant Water, being liable to Corruption, and unless often put in Motion, becoming putrid.

To this it may also be added, that some Diseases answer to the particular Seasons of the Year;

Year; thus Pleurifies, Peripneumonies, Anginas, Tertian Fevers are common to the Spring—Quartans, putrid malignant ones, Choleras, Dysenteries to the Autumn; according as the usual Constitution of the Air at those Seasons conduces to the Production of the former or latter Disorders—However should those Seasons be unfavourable, the Diseases peculiar to them will be very greatly varied; so that those, which were usually met with in Autumn, will be rife in a warm, moist Spring; in a cold Autumn again the Spring-Diseases, as Pleurifies, Peripneumonies, &c. will prevail*—Nevertheless in general, as to the autumnal Fevers of what Kind soever, they are the Humours themselves of the Body which have then a much greater Tendency to Putrescence upon the Account of the preceding Heat of the Summer, nor do they admit of so plentiful Bleeding—An obstructed Perspiration in the Spring from catching Cold, commonly † produces inflammatory Fevers—In the Autumn putrid or malignant.—Nay, if in the autumnal Seasons any Diarrhœas should rage up and down, they are much more acrid, and bilious, than in the Spring, as has been repeatedly and sufficiently taken Notice of by Physicians—since the Heat of the Summer very greatly increases the Perspiration, dis-

* Hippocrat. Lib. de Humor. Sect. 7.

† Sanct. Aphor. 35. Sect. 2.

sipates the more humid Parts of the Body; heightens the Salts, and animal Oils, from whence there is perceptibly produced a considerable Acrimony in the Blood, which goes on still increasing unto the Autumn, unless it is daily corrected by proper diluting, demulcent Liquors. But attend however to the † *Coan* Oracle, the Interpreter of Nature, as to this Subject:— “ *Omnium Generum Morbi profectò*
 “ *omnibus Temporibus fiunt, quidam verò in*
 “ *quibusdam magis gignuntur, & exacerbantur,* Aphor. 19^o Sect. 3 — *Qualia Tempora*
 “ *(Ὡραὶ) tales Morborum Constitutiones—*
 “ *Tempora tempeſtiva, & bene ordinata,*
 “ *Morbos regulares (εὐταθείας) & judicati faciles faciunt.* Lib. de Humorib. Sect. 7, et
 “ Aphorism. 8. Sect. 3.—Atqui, prout variaverit Tempus, ſimiles, aut diſſimiles
 “ erunt Morbi, qui in hoc oriuntur. Lib. 1, de Humor. Sect. 7 — * *Conversiones Tem-*
 “ *porum (Anni) maximè pariunt Morbos, &*
 “ *in iſſis Temporibus, magnæ Mutationes,*
 “ *Frigoris putà, aut Caloris; & ſic de cæteris,* Aphorism. 1, Sect. 3, Lib. de Humor. 8.

† I have generally cited *Linden's* Edition of *Hippocrates*, not becauſe I approve of this, (ſince in Reality I greatly prefer the *Foeſian* to it) but becauſe he has divided the Text of *Hippocrates* into different Sections, by Means of which the Paſſages cited are more eaſily found.

* *Αἱ Μείζονες τῶν Ὡρῶν.*

“ ———Con-

“ ——— Constitutiones Hominum aliæ ad Æſ-
 “ tatem, aliæ ad Hyemem, bene aut malè ſe
 “ habent, Morbi porrò ad Tempora, Apho-
 “ riſm. 2. 3, Sect. 3, Lib. de Humor. Sect. 8.
 “ ——— In anno autem aliquando Hyems max-
 “ imè prævalet, aliquando Ver, modò Æſtas
 “ modò Autumnus, Lib. de Natur. Homin.
 “ Sect. 16—Hyeme Pituita in Homine auge-
 “ tur, ibid. Sect. 12—Vere Pituita magis do-
 “ minatur, at Sanguis increſcit, ibid. Sect. 13
 “ —Æſtate Sanguis adhuc viget, ſed & Bilis
 “ exaltatur ; per Æſtatem etiam, ac Autum-
 “ num, Bile Corpus abundat ; Autumno au-
 “ tem atra plurima eſt, & fortiffima, Sanguis
 “ verò parciffimus, ibid. Sect. 14.”

Whatever Diſeaſes become more aggravated
 in the Winter, intirely ceaſe in the Summer ;
 ſo likewise the Summer’s Diſeaſes diſappear in
 Winter. Lib. 3. Epidemic. Sect. 3, & de Na-
 tura Homin. Sect. 17—Should however a very
 cold Spring ſucceed a very long Winter, ſuch
 Diſorders are then apt to prevail, as are com-
 mon in the Winter, Coughs, Peripneumonies,
 Anginas :—Beſides ſhould the Spring-Weather
 be like the Weather in Autumn, it produces
 the Jaundice, altho’ this is properly an autum-
 nal Diſeaſe, Lib. de Humor. Sect. 7.—If again
 this, or that Conſtitution of the Seasons ſhould
 continue longer than common ; the Diſorders
 peculiar to it will not only laſt longer ; but al-

so be more violent in Proportion, as that particular Season prevails more, and lasts longer; nay, they will become exceedingly rife, and obstinate for a very considerable Length of Time, Aphor. 7, Sect. 3, Lib. de Humor. Sect. 9.—According to the Constitution of the Seasons also, the Droughts (*ὄχμοι*) are more healthy, and less fatal, than the Rains, Aphor. 15, Sect. 3 — Altho' in very great Droughts, acute Fevers are more common, *ibid.* Aphor. 7 — But in very rainy, tedious, putrid, Fevers, Fluxes, Squinzies, Apoplexies, *ibid.* Aphor. 16 — * Southerly Winds produce the Head-Ach, relax the Body, and render it humid, languid, and sluggish — A north-east Wind occasions Coughs, Inflammations of the Fauces, Costiveness, Shiverings, Pains of the Side, and Breast; but at the same Time, it braces up the Body, strengthens it, and renders it more active, and gives it a good Complexion, *ibid.* Aph. 5, 17 — and Lib. de Hum. Sect. 8. For of all the Winds the north-easterly is the driest, and for that Reason the most healthy: A southerly is in all Respects quite the contrary, Lib. de Morbo sacro, Sect. 15.—If the Winter proves moderate neither too mild, or too cold, and

* *Νότος κατηβατικός*, and therefore *Horace* very justly calls it *Plumbeus*:

“ ————— Perdit, nec Plumbeus Austër.”

Horat. Lib. 2. Sat. 6.

seasonable

seasonable Rains fall both in the Spring, and Summer, it must necessarily be, that such a Year must be the most salubrious, Lib. de Aëre, Aquis & Locis, Sect. 25—Should the Winter nevertheless prove dry with a north-easterly Wind; but the Spring rainy with southerly Winds, the Summer will abound in Fevers; since it is impossible but that by the Accession of the Heat, very acute Fevers should attack Numbers, especially the Phlegmatic; whilst Dysenteries do the same by the female Sex, and Men of a moister Constitution, *ibid.* — If however Rains, and cold * north-easterly Winds should set in about the Rising of the Dog-Star, there is Hopes of the Removal of these Disorders, and an healthy Autumn, *ibid.* Sect. 26 — If at any Time a rainy Summer with southerly Winds should be succeeded by such an Autumn, the Winter will prove very unhealthy—whereas a rainy Autumn accompanied with southerly Winds, succeeding a dry Summer with north-easterly Winds, occasions Head-Achs, † Inflammations of the Brain, Heavinesses, Hoarsenesses, Coughs, and even Consumptions, *ibid.* Sect. 28 — If the Autumn is dry with north-easterly Winds; nor any Rains fall either in the Dog-Days, nor yet during *September*, it is of great Advantage to

* Καὶ χειμῶν, καὶ αἱ Ἑτήσιοι.

† Σφακίλους τοῦ Ἑγκεφάλου.

the Phlegmatic, and Persons full of Humours, as well as Women: Whereas to those, who are bilious, it is very pernicious, since it dissipates the most humid Parts of the Body; and leaves behind the grosser, and more acrimonious, *ibid.* Sect. 29—Upon this Account a Physician should treat Diseases in such a Manner, as always to pay a proper Regard as well to the different Changes of the Weather, as the various Constitutions of his Patients, curing Contraries by Contraries; and therefore ought to brace up, when there is too great a Relaxation, and to relax, where there is a too great Bracing up, *Lib. de Natur. Hominis*, Sect. 17, 18. Nor has the divine old Man indeed only most excellently described the different Diseases arising from the different Constitutions of the Weather; but he has also moreover given us the very best Method as to the Regimen, and Medicines to be made Use of, also to prevent them, particularly in *Lib. de salubri Viētūs Ratione*, and also in the Beginning of *Lib. 3, de Diæta*. But as to this,

“ Jam nunc perscribere longum est.”

I have extracted those few Passages from the Writings of *Hippocrates* here and there, and have perhaps translated them not quite so literally; but in such a Manner however as (if I am not very much mistaken,) delivers faithfully

faithfully the true Sense of the Author—But ye young Novices in Physic approach nearer to the Fountain-Head, and drink freely, and you will from thence perceive, how sagacious, and diligent the Ancients were—You will see, that those Observations made formerly were not less ingenious, than the present *Rationale* of Physic, as *Caius Pliny* formerly very justly affirmed of them in his *Histor. Natural. Lib. 18, c. 29.* Should it be objected notwithstanding, that the Observations of *Hippocrates*, and his School being made in *Greece* have no Relation to ourselves; I would have such a one know, that the Nature of Mankind is every-where the same. Thus the Solids of the human Body are always braced up by a dry Cold, and the Fluids condensed; whilst a moist warm Atmosphere relaxes both—A damp, cold Season always obstructs Perspiration—a warm Serenity always promotes it—so that very great Alterations in the Weather in Relation to Cold, Drought, or Dampness equally produce in all Parts of the World very great Effects. Nor indeed upon the entering into a diligent Comparison, do the Observations of *Hippocrates* seem to differ much from those made a few Years since, and in Places far, very far distant from *Greece* even amongst us,—

“ Et penitus toto Divisos orbe Britannos.”

This however is an Objection, which the very celebrated *Wintringham* has most thoroughly refuted in his Preface to his *Commentarium Nosologicum*:—I can also myself add this, that altho' the Country in *Greece* enjoys a milder Atmosphere, than our Island does; yet is it frequently subject to very considerable Alterations in the Constitution of the Air; nay in those very Constitutions of it described by *Hippocrates*, we now and then in our Reading meet with, Ὕδατὰ πολλὰ, Αὐχμοί, Χειμῶνες μεγάλοι, Χιόνες μεγάλαι, Οὐρανὸς λαιλαπώδης, ἐπινέφελος, &c. besides which we also meet with up and down in *Hippocrates* popular Fevers of the very same Kind with those, that sometimes infest *Great Britain*—For an *epidemic* Fever is only the Effect of a morbid Cause, which Cause generally proceeds from some particular Constitution of the Air; by which Means a northeasterly Wind produces one Kind of Fever, a southerly another in whatsoever Place indeed, that the former, or latter blows any Length of Time.

In the following as well as the preceding History of *epidemic* Diseases, I have not only laid down those Fevers, which reigned amongst the People in common; but also those other Disorders, which were here, and there intermixed with them, and that for this Intention, that from hence the Nature of each particular Disease

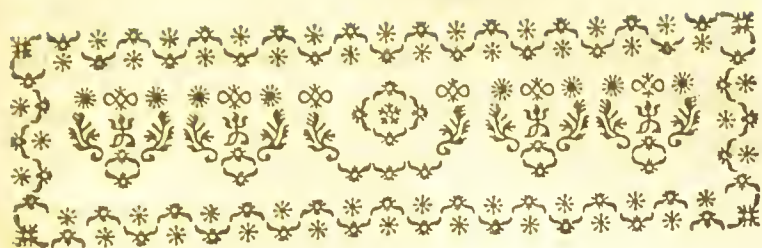
Disease might be the more fully apparent : Herein following the Steps of my Great Master, who in his Description of the Air's Constitution, and Diseases, observed this very Method—since it very frequently happens, that whilst Pleurifies, and Peripneumonies are rise in a cold, dry Season ; Numbers are at the same Time seized with *Anginas*, *Ophthalmies*, *Rheumatisms*, and violent Pains in the Intestines, as arising no less from an inflamed, and viscid State of the Blood, than even Pleurifies and equally requiring letting Blood ; altho' at other Times, they are more easily carried off by Purgatives—Suppose for Instance the Small-pox, or the Measles to be also common in such a Season, I should, *cæteris paribus*, advise Bleeding much more freely in these Disorders, than when such a cold Temperature of the Atmosphere did not prevail ; nor was there consequently so viscid a Disposition in the Blood—If we know indeed what particular *Crasis* of the Blood, this, or that Constitution of the Atmosphere will produce, we can from thence easily conjecture, what will be the Maladies of the Body, and what Remedies are necessary in them ; since Diseases, according to the Observation of † *Hippocrates*, do not attack People all at once ; but are gradually forming, altho'

† Lib. 1, de Diæta, Sect. 3.

they break out of a sudden ;—For Example, Men of robust Constitutions and habituated to a great Share of Exercise have their Blood naturally thick, and fizy, and these upon the Setting in of a dry, north-easterly Season have their Fibres still more, and more braced up, and the Fluids are so much condensed, and thickened ; that at length their whole Mass of Blood becomes a mere Glue. Under these Circumstances an inflammatory Lentor occasioned by catching Cold, by too great Labour, by Intemperance, or indeed from any Irregularity in Life was easily occasioned ; which at one Time affecting the Lungs caused a Peripneumony, at another Time invading the Pleura, a Pleurisy, at another the Intestines, produced a colical Inflammation.

Thus you see, friendly Reader, how greatly Meteorological Observations tend to the Prevention, as well as the Cure of Diseases—Enjoy therefore those for the present, and at length publish better. — “ Quatenùs nobis denegatur, “ diu, vivere, relinquamus aliquid, quo nos “ vixisse testamur †.”

† Plin. Epist. Lib. 4, Epist. 7.



OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1738.

JANUARY.

New Moon the 9th. Full Moon the 24th.

N the Beginning of this Year the whole Heavens were covered over with Clouds, which shed almost perpetual Showers with intervening Storms. Thus began the Month; for afterwards we had less Rain. The Constitution of the Atmosphere however continued very dense, and humid, which kept the Barometer very high, a Thing which very frequently happens in a very foggy † Atmosphere by the joint Pressure of the Air, and Vapours.

† See the Month of *January* 1728 Vol. I.

Little

Little Frost, nor the usual Cold in this Month — The Wind generally unfettled, and sometimes a dead Calm.

Rain	$\frac{''}{1.}$	$\frac{''}{2.}$	$\frac{'}{3.}$	4.	5.	$\frac{'}{6.}$	$\frac{'}{7.}$	8.	$\frac{'''}{9.}$	10.—12.	
	$\frac{'}{13.}$	$\frac{'}{16.}$	$\frac{''}{21.}$	22.	23.	30.	Dig. Dec.				
$= 2.974.$											

A tempestuous Night the 2d, W. S. W. 4_x:
 A Storm the 5th, p. m. S. W. 4. Lightning, Thunder, and a most violent Whirlwind the 6th, at Six o'Clock, p. m. — A Storm 7 p. m. S. W. 4. A terrible Storm the 9th, p. m. and almost all Night, S. W. 4_x. Snow with Hail the 11th. Frost 14, 15, N. N. W. 1. A great *A. B.* the 14th, at Ten p. m.

Greatest Height of	8	17.	30.5.	N. 1.	} Mean Alt.
Least	————	9.	29.0.	S. W. 4 _x .	
Coldest Day	15.	66.	N. N. W. 1.	} Mean Height Ther.	
Warmest	23.	48.	a Calm.		
					29.9 $\frac{2}{29}$.
					54 $\frac{7}{29}$.

A *catarrhal* Fever, and the Rheumatism up and down; some Pleurisies; but the † *bastard* Peripneumony much more common: Coughs in Abundance, and Numbers were afflicted with a severe Gout. A slow *nervous* Fever prevailed much, which appeared to come to a favourable Crisis by the breaking out sometimes of red, angry Pustules on the ninth, eleventh, or fourteenth Day; but more especially so, if

† Consult what I have said concerning the *bastard* Peripneumony in my *Essay on Fevers*, p. 222:

the

the Urine threw down a thick Sediment. Indeed there are but little Hopes to be formed from an Eruption of Pustules; whilst the Urine continues crude, and limpid—Even in the Small-pox, and Measles, this is a very bad Omen: Nor indeed is any Kind of Sweat to be accounted salutary; so long as the Urine continues thus limpid.

F E B R U A R Y.

New Moon the 7th. Full Moon the 23d.

The Constitution of the Atmosphere remained exceeding moist unto the 5th of *February*, when upon the Setting in of a smart Frost, the north-east Wind dispelled the Vapours. From the 16th, the Wind was generally westerly, and Things took a quite different Aspect.

Rain 8. $\frac{11}{16}$. 17. $\frac{11}{18}$. 20. $\frac{11}{22}$. 24. 26. 27.

Dig. Dec.
= 0.928.

Snow upon the high Hills the 14th, but none here.

Greatest Height of	8	6. 30.4.	E. N. E. 1.	} Mean Height
Least	—	18. 29.0.	S. W. W. 3.	
Coldest Day	—	13. 75.	N. E. 1 ^x .	} Mean Height
Warmest	—	1. 49.	N. W. b W. 1.	

29.8 $\frac{4}{8}$.
58 $\frac{3}{8}$.

Coughs and Anginas very common among the Horses, by which Numbers of them were suffocated—A Pleurisy, or a Peripneumony, which

which however was mostly of a spurious Kind, seized several; Coughs in Plenty. Altho' the Season was not unhealthy, yet very many Persons dwindled away in a pulmonary Consumption occasioned by a † *catarrhal* Fever improperly treated, which was exceedingly rife here in the latter End of *November*, and *December*. Such as were asthmatic, were troubled with dry tickling Coughs, and in whose Lungs small Tubercles had for some Time been formed, (which by their obstructing the Circulation of the Blood and by that Means being easily inflamed, and at length degenerating into Ulcers,) were in the utmost Danger: For by shutting up a Passage to the Blood in these obstructed Parts, too large a Quantity of it deluged in upon the other Parts of the Lungs, which in the Consequence produced an *Hæmoptoë*, an Inflammation, or a consumptive Distillation upon the Cavities of the Bronchia.

However all pulmonary Consumptions do not arise from Ulcers (since this is a Cause more rare, than is imagined,) since Numbers every Day for a very considerable Length of Time cough up large Quantities of a salt, sweet, and even of a quite insipid Mucus, which has neither any Fœtidness, or Purulence in it, owing to a too great Relaxation of the Glands

† Post nimias Distillationes Tabes. *Cels. Lib. 2, c. 7,*

and the Ducts of the *Aspera Arteria*. This however, altho' it often protracted the Sick for a long Time was not less fatal, than if they had brought up mere Pus. Of the same Tendency is sometimes a too great Discharge of the vital Fluid to such, as are troubled with a *Diabetes*; as well as those, who dwindling away in a *Diarrhœa* appear upon Dissection, not to have the very smallest Ulcer. I lately dissected a little Boy of three Years old, whose Intestines I found very white, exceeding thin and cleansed, as if with the nicest Art, but not in the least ulcerated.

This is an Evil, which is heightened by a Person's catching the slightest Cold; for the small Pores of the Skin being by these Means shut up, there is the greatest Influx upon the Lungs; just as we very frequently see the retained *Perspirabile* streaming down the Nostrils. On the Contrary, People oftentimes labour under a dry Cough, and a Difficulty of Breathing, the smaller Glands of the Lungs being so very much obstructed, and indurated, that they are at length almost transformed into the Hardness of † Stone; whilst the Bronchia from

† I not long since met with a consumptive young Gentleman, who coughed up small, rough Stones, which lacerating the Trachea, occasioned his spitting up a good deal of Blood.

a too great Dryness and a Deficiency of the natural Mucus, become quite rigid. Who but must see how different Treatment those two Maladies require, and yet in the common Practice of Physick, a sufficient Distinction is not always made between them? Numbers indeed in every Cough, whether dry, or humid apply their *oily, emollient, sweet* Linctusses. These indeed in the first of these Cases, especially if some expectorating Medicines be added to them, may be very proper: Whereas in the latter, where a serous Colluvies deluges the Lungs, it is quite the Reverse: since these relax too much, occasion a Lentor in the Humours, and check Perspiration, and from hence the very original Disease is considerably augmented. This brings on Inappetency moreover, and Indigestion, and at last a colliquative *Diarrhœa*. In this Case, the rightest Method to be used, is to have Recourse to mild † Sudorifics, Blisters between the Scapulæ, and now and then gentle Cathartics, frequently subjoining also Anodynes, especially if the Flux be very thin, and irritating; since these Medicines soften, and thicken it in such a Manner; that it is much more easily discharged by Spittle. Moreover in this Kind of Disorders, a Decoction of *Peruvian Bark* with *Guaiacum* Wood, and *Styrax*,

† See *Benner's Theatr. Tabidor.* Sect. 28, 30, &c.

which in the other Case would be very pernicious are very beneficial; nor are drying, proper Fumigations unserviceable, which in all Distillations have a very great Effect.

When the small Glands of the *Bronchia*, and *Trachea* are obstructed, and there is not a sufficient Secretion of oily Mucus to lubricate their Membranes, as often happens, and the muscular Fibrillæ of the || Arteria Aspera, and the Bronchia are rigid, and too much braced up; there a soft, emollient, warm Drink and the Vapour of it being frequently taken in does (with the Addition of oily and relaxing Medicines now and then) prove of great Advantage.

M A R C H.

New Moon the 9th. Full Moon the 24th.

A north-easterly Wind ushered in this Month: But a moist south-west soon succeeded. From the 10th to the 16th the north-east Wind produced a dry, and colder Constitution of the Atmosphere; from that Time we had mostly a south-westerly Wind with frequent Rain.

Rain	5.	<u>8.</u>	9.	11.	<u>17.</u>	18.	19	—	22.	<u>23.</u>
24.	<u>28.</u>	<u>29.</u>	30.	—Hail		1.	= 1.730.			

|| Andr. Laurent. Hiflor. Anatomic. Lib. 9, c. 14, also
Jo. Bapt. Morgagni Adverfar. Anatom. Sect. 15.

A flight

A slight Storm the 8th, p. m. S. S. W. 4^x.—

A terrible Storm the 19th in the Morn. S. 4^x.

Greatest Height of	☉	31. 30. 1.	N. N. W. 1.	} Mean Height
Least	—	08. 28. 8.		

29.5 $\frac{24}{100}$.

Coldest Day	16. 62.	N. N. E. 2.	} Mean Height
Warmest	22. 46.	S. S. W. 2.	

54 $\frac{6}{100}$.

Numerous Ophthalmies—Several Coughs, and those very violent, which carried off a great many; but those more particularly, who had been for several Years asthmatical, or who labouring under the pernicious Consequences of the epidemic Fever in the Winter, had an Obstruction of the Lungs, and Oppression of the Breast, and from hence soon died consumptive.

Pleurisies, and Peripneumonies common; and frequently both the Sides, and Lungs were violently affected. They term that Disease a † *Pleuro-Peripneumony*, in which at the same Time, that there is a violent Pain in the Side, there is also a severe Cough, and Load upon the Breast, and this is still more apparent, if bloody Spittle is at the same Time pumped up.

Indeed a free Expectoration of concocted loose Matter, but very slightly tinged with Blood, gives an happy Termination to the Disorder; frequently however either a very thin and acrid Colluvies is discharged; or all the Efforts of Nature prove vain, by Means

† See my *Essay on Fevers*, Chap. II, of the Peripneumony, Page 199.

of a very thin unconcocted Humour's eluding the Energy of the Lungs; since, when there is nothing expectorated, or else nothing but crude, frothy Matter, it is a most fatal * Sign.

Now also in these pulmonary Maladies there is oftentimes an Eruption of large, angry, and sometimes very painful Pustules about the Breast, Shoulders, and Neck, generally about the fifth or seventh Day, some of which discharge a large Quantity of very sharp *Ichor* †: This is most commonly a very happy Crisis to the Sick. — Indeed, in all Diseases, diligent Observation is to be made, which Way Nature points: Thus, when she produces Pustules or Boils in the Shoulders, or Legs, we should endeavour by the very same Methods by our Art to alleviate the Disease, as by the Application of *Epispastics*, Scarifications, &c. In like Manner, in every Effort of Nature, whether thro' the Pores of the Skin, by Stool, or Urine, or by a copious Expectoration, the Physician is to be particularly careful to apply proper and concurring Remedies.

A P R I L.

New Moon the 8th. Full Moon the 23d.

Both the Wind and the Weather were very changeable this Month, several Showers falling,

* See my *Essay on Fevers*, &c. Page 199.

† Φλύκταιναι, *Hippocrat.*

as usual : Towards the End of it, however, the Wind was mostly easterly, and very cold.

Rain 1. 4—6. 11. 12. 14. 15. 19. 21. 22.
 Dig. Dec.
 23. 24. 25. = 1. 110. — Ice 20. 24. E. N. E. 1.

A small *A. B.* the 5th, at Ten p. m.—
 10. W. N. W. 2.

Greatest Height of ☉	17, 30.2, E. b N. 1.	} Mean Height
Least	23, 28.8, W. S. W. 2.	
		29.6 $\frac{1}{8}$.
Coldest Day	20, 56, E. N. E. 1.	} Mean Height 47 $\frac{1}{2}$.
Warmest	13, 40, S. W. 2.	

Numbers are afflicted with Ophthalmies : Numerous Coughs : Several running into Consumptions, from a sharp Cough attended with an hectic Fever, were carried off. Indeed it is always the Case, that asthmatical People, and those touched in their Lungs, are greatly injured whenever an *epidemic* Cough rages, a new Evil being then added to an old Disease.

Such as are consumptive are always very much endangered upon the Coming-on of the Summer ; because, from the daily-increasing Heat of the Season, the Blood is expanded, and by that Means has a more difficult Circulation thro' the obstructed Lungs ; and from hence the hectic Fever and the colliquative Sweats are increased. Such Kind of Patients therefore I advise to hasten into the Country, where a purer Air, and a cooler, an easy, and

regular Diet, and perhaps the Drawing of a little Blood, if there should be too great an Ebullition in it, may check the too rapid Progress of the Disease.

M A Y.

New Moon the 7th. Full Moon the 22d.

A continued southerly Wind almost to the 20th of this Month sunk the Quicksilver in the Barometer, and rendered the Atmosphere dense and moist. For three Days after, a north-easterly Wind, and then a westerly.

Rain $\frac{1}{3}$. $\frac{1}{4}$. 6. 9. 10. 12. $\frac{1}{13}$. $\frac{1}{14}$. 15. $\frac{1}{17}$.

Dig. Dec.

18. 20. 22 — 24. 26. 27. 30. = 1.544.

Greatst Height of ☿ 21, 29.8, N. E. 1. } Mean Height
Least ————— 5, 29.0, S. S. W. 1. } 29.4

Coldest Day 2, 54, S. S. E. 2^x. } Mean Height 38 $\frac{8}{29}$.
Warmest 21, 30, a Calm, p. m. }

Coughs, Heaviness in the Head, and humid Ophthalmies, common. Some were seized with Apoplexies, some with Palsies; and several with Pleurisies, and Peripneumonies, especially in the Beginning of the Month. Intermitting Fevers here and there.—

J U N E.

New Moon the 6th. Full Moon the 20th.

For the whole Month of *June* the Wind was westerly, veering sometimes to the South, some-

times to the North. This occasioned much Cold and Rain. The Atmosphere in the mean Time was very heavy and moist.

Rain 2. 4. 7. 8. 10. $\frac{1}{11}$. $\frac{11}{12}$. 13. $\frac{1}{14}$. $\frac{1}{15}$. $\frac{111}{16}$.
 $\frac{11}{20}$. 22—24. ————— Violent Hail 12. 13. = 2.398. Dig. Dec.

The Wind * *Circius* very turbulent the 1st, p. m.—A Storm the 14th, in the Beginning of the Night, S. W. 4x.—The 20th in the Morn S. W. b S. 4.—Lightning the 11th at Night.

Greatest Height of ☿	30, 29.9, N. W. 1.	} Mean Height
Least	16, 28.9, S. W. 2.	
Coldest Day	18, 42, W. N. W. 1x.	} Mean Height
Warmest	30, 24, a Calm, p. m.	
		29.4 $\frac{1}{2}$ $\frac{3}{8}$.
		34 $\frac{1}{2}$ $\frac{5}{8}$.

Several, and most obstinate Coughs ; also several Peripneumonies, both of the true and bastard Kind. Frequent, and sometimes very violent Attacks of the Apoplexy.

Such Persons as have large Heads, and short Necks, and have a great deal of Blood, very easily fall into Apoplexies, from whatever Cause produces a too great Rarefaction of the Humours.—These People therefore should, in the foregoing Spring, and on the Coming-on of the hot Weather, guard against their Disease, by letting Blood, and by using a light and sparing Diet ; especially if a Giddiness or Pain in the Head, a Tinkling in their Ears, or

* About this Wind, see Vol. I, Page 5.

1738.]

Epidemic Diseases.

13

false and instantaneous Flashes of Light, should attend them ; since, if these Things are not early guarded against, they are generally the certain Forerunners of a sudden Death.

J U L Y.

New Moon the 5th. Full Moon the 19th.

There was now a very great Alteration in the Atmosphere ; since this Month was both dry and very warm, the Wind blowing mostly easterly or northerly, which raised the Barometer and dissipated the Vapours.

Rain 11. 12. 14. 19. $\frac{11}{20}$. 21. 23. 28. $\frac{11}{20}$ Dig. Dec. = 0.590.

Thunder and Lightning the 20th, early in the Morning.—Very warm Days the 4th and 17th.

Greatest Height of ☿	3, 29.8, E. 1.	} Mean Height
Least	19, 29.2, S. W. 2.	
Coldest Day	31, 33, N. 1.	} Mean Height 24 $\frac{4}{8}$.
Warmest	4, 17, a Calm.	

Violent Disorders in the Head still up and down, and very many Coughs : The bilious Colic common, and very profuse Sweats debilitated almost every body. Several Women had now a very profuse Discharge of the Menfes, which rendered them exceeding weak and languid. Was this owing to a Solution of the Blood, or only to its Rarefaction ?

D 3

AUGUST.

AUGUST.

New Moon the 4th. Full Moon the 18th.

We had now a Return again of a rainy Season, which, being for the Time of Year very cold, occasioned a very bad Harvest. Now and then we had a north-westerly Wind, oftentimes a south-westerly; — sometimes a south-easterly, sometimes a north easterly.

Rain $\frac{1}{3}$. 5. 7. $\frac{1}{8}$. $\frac{1}{9}$. $\frac{1}{10}$. 12. 14. 17 — $\frac{1}{22}$.
 $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{25}$. 27. 28. = 2.210. — Hail the 10th.
 Dig. Dec.

A flight Storm with Lightning the 7th at Night, S. b W. 4x.

Greatest Height of ☿	29, 29.9, N. 1.	} Mean Height
Least	8, 29.2, S.W. b S. 3.	
Coldest Day	27, 39, N. N. E. 1x.	} Mean Height 32 $\frac{6}{30}$.
Warmest	9, 27, S. W. b W. 2.	

The Cholera, and Colics, here and there; — Squinzies, and putrid Fevers, not a few. The Small-pox, which were brought hither by the unhappy, exiled *Saltzburghers*, were now rife.

The Small pox are with the justest Reason placed by Physicians in the Rank of the most contagious Diseases; since one little Child only being seized with them, very often communicates the Infection on all Sides, far and near: However, unless there is such a Constitution
 of

of the Atmosphere, as nourishes the Contagion, concurring at the same Time, the Disease is frequently confined to one or two Houses, and is extinguished in its very Infancy. — This is also sometimes observed to be the Case even in the * Plague, which a very cold Winter puts a Stop to.

SEPTEMBER.

New Moon the 2d. Full Moon the 16th.

Constant Rain almost to the Middle of *September*, the Wind being now and then southeasterly, sometimes south-westerly. However from the 18th the Wind continued easterly or northerly.

Rain 1. $\frac{1}{3}$. $\frac{2}{5}$. 6. $\frac{3}{7}$. 8. 9. $\frac{2}{10}$. 11. $\frac{3}{14}$. $\frac{2}{16}$.
 $\frac{2}{18}$. $\frac{2}{27}$. 28. = 2.912.
Dig. Dec.

A Storm the 10th, p. m. S. W. b W. 4.

Greatest Height of	8	30, 30.0, E. b. N. 1.	} Mean Height
Least	—	10, 29.3.	

Coldest Day 29, 48, E. N. E. 1. } Mean Height 39 $\frac{22}{29}$.
Warmest 1, 32, S. W. 3x.

The Small-pox very rife, the Measles and Gripings in the Bowels common. A catarrhal Fever infested Children ; but this Month was far from being sickly.

* See *Hodges* on the Plague, in the Beginning.

O C T O B E R.

New Moon the 2d. Full Moon the 16th.

New Moon the 31st.

Both in the Beginning and the Conclusion of this Month we had an easterly Wind; in the intermediate Time it was very various. A boisterous southerly Wind blowing frequently occasioned the Falling of the Barometer, and was attended with Rain; however, from the 23d, we had none at all.

Rain 2. $\frac{''}{3}$. $\frac{'}{4}$. $\frac{'''}{5}$. 6. 7. 10. 11. $\frac{''}{12}$. 15. $\frac{'}{18}$,
 $\frac{'''}{20}$. 22. 23. = 3.330.
 Dig. Dec.

A Storm the 13th, W. S. W. 4^x.—The 20th, p. m. and also the following Night, S. 4.—An exceeding great Storm the 23d at Night S. 4^x, —Very great Hoar-Frosts the 16th and 17th.—A. B. the 21st, H. 10. N. W. b N. 1.—24th, H. 9, W. N. W. 1.—25th, N. N. W. 1.—27th, H. 9, W. b N. 1.

Greatest Height of ☉. 16, 30.4, E. N. E. 1. } Mean Height
 Least ————— 6, 28.7, S. W. b S. 3^x. } 29.4 $\frac{2}{3}$.

Coldest Day 22, 55, N. N. W. 1. } Mean Height 45 $\frac{2}{3}$.
 Warmest 5, 40, S. W. b W. 2^x. }

The Small-pox and Measles up and down; Ophthalmies, Rheumatisms, and Colics frequent; slow nervous Fevers here and there.

NOVEM-

N O V E M B E R.

Full Moon the 15th. New Moon the 30th.

Very little Rain fell before the 17th, whilst the Wind was easterly, or north-easterly, the Barometer rising. Afterwards came on a dark, southerly Wind, and much Rain. This rendered the Constitution of the Atmosphere, which before was sufficiently dry and rare, exceedingly humid.

Rain 8. $\frac{''' }{17}$. 18. $\frac{' }{19}$. 20. $\frac{' }{23}$. 24. $\frac{'' }{25}$. $\frac{' }{26}$. $\frac{' }{29}$.

$\frac{' }{30}$. — Violent Hail the 27th, early in the

Dig. Dec.

Morning. = 1,874.

A Storm the 19th, from Day-break to late in the Evening, S. W. 4. — The 20th, p. m. W. S. W. 4^x. — A violent one the 25th, p. m. S. 4^x. — A very great Halo about the Moon the 10th. — The 11th, in the Beginning of the Night, E. S. E. 2,

Greatest Height of ☿	9, 30.3, E. N. E. 1.	} Mean Height
Least	25, 28.8, S. 4 ^x .	

Coldest Day	9, 66, a severe Frost.	} Mean Height 53 $\frac{1}{3}$.
Warmest	20, 47, S. W. 3 ^x .	

Pleurisies, Peripneumonies, and Ophthalmies very common, especially in the Beginning of this Month. Several were seized with Rheumatisms, and some with a slow Fever. Coughs, Squinzies,

Squinzies, Rheums, and Head-achs everywhere. Small-pox still; the Measles epidemic.

D E C E M B E R.

Full Moon the 15th. New Moon the 29th.

In the Beginning of this Month the Constitution of the Atmosphere was warm and humid, a rainy, south-westerly Wind blowing almost constantly. From the 11th to the 24th the Wind was north-east, which raised the Barometer to an amazing Height, and occasioned a cold and somewhat drier Atmosphere. Afterwards the Wind was changeable, cold, and rainy.

Rain $\frac{1}{1}$. 2. 3 — 5. $\frac{1}{6}$. 7 — 9. 12. $\frac{1}{20}$. $\frac{1}{25}$.

26 — 30. $\frac{1}{31}$. — Hail, with Thunder and Lightning, the 7th. — Snow the 21st in the

Dig. Dec.

Night. = 2.404.

Greatest Height of	8 14, 30.7, N. N. E. 1.	} Mean Height
Least	3, 29.1, S. W. 2.	} 29.8 $\frac{23}{31}$.
Coldest Day	24, 72, E. N. E. a severe Frost.	} Mean Height
Warmest	2, 47, W. S. W. 2.	} 57 $\frac{17}{31}$.

* Ophthalmies, Rheumatisms, and the Measles still very rife. The Small-pox up and

* Fred. Hoffman. in his *Medicin. rational.* Tom. 4. Part. 1. Cap. de Inflam. Oculor. observes, that, in a cold, moist Constitution of the Atmosphere, Ophthalmies, of a long Continuance, are very common.

down;

down ; and several were seized with Giddiness in their Heads. Squinzies, pleuritic and peripneumonic Fevers very common ; not a few slow nervous ones. The greater Part however were acute, arising from a sharp, inflammatory Viscidity in the Blood, which, being translated to different Parts of the Body, produced different Diseases, suppose a Peripneumony, a Squinzy, an Ophthalmy, &c. according as the obstructing Lensor affected this Part, or another. Hence it is no Wonder that we see an Ophthalmy changed sometimes into a Squinzy, and a Squinzy into a Peripneumony. — Τῶν ὀδυνέων καὶ ἐν πλευρῇσι, καὶ ἐν στήθεσι, καὶ ἐν τοῖσιν ἄλλοισιν μέρεσιν ἢν μέγα διαφέρωσι, καταμαθητέον, *Hippoc.* Aphor. Sect. 6.

The whole Quantity of Rain, which fell for
Dig. Dec.
the Year 1738, was = 24.004.



OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1739.

JANUARY.

Full Moon the 13th. New Moon the 28th.

 GREAT deal of Rain and Tempest, which sunk the Barometer, ushered in this Year. Nevertheless, soon after, upon the Coming on of a clear Sky, and the Wind being north-westerly, it rose again. Presently again we had a cloudy south-west Wind, and soon after a north-west; the Wind, being so very frequently changeable, greatly varied the Aspect of the Heavens. However during this whole Month the Atmosphere was very dense and humid, and also generally far warmer than usual.

Rain

Rain $\frac{''}{1}$. 2. $\frac{''' }{3}$. $\frac{''' }{4}$. 5. $\frac{''' }{6}$. 10 — 13. $\frac{' }{19}$. 20.
 21. 23. $\frac{''}{24}$. $\frac{''}{25}$. 26. 28. 29. 31. — Hail 1. 5.
 Dig. Dec.
 25. — Snow 2. = 3.962.

A Storm the 3d at Night, and all Day the 4th,
 W. S. W. 4. — The 6th, at Night, W. S. W. 4.
 — The 24th, S. W. 4. — The 29th, at Night,
 S. S. E. 4. — Thunder and Lightning the 4th
 and 25th.

Greatest Height of ☿ 11, 30.3, W. N. W. 1. } Mean Height
 Least ————— 4, 28.7, W. S. W. 4. } 29.7.
 Coldest Day 2, 66, N. W. 1.^x. } Mean Height 54 $\frac{16}{2}$.
 Warmest 31, 50, S. W. 3.^x. }

The Measles epidemic, the Small-pox scattered up and down, both in Town and Country: Numbers laboured under a very severe and obstinate Rheumatism; several also were afflicted with a very violent and tedious Gout. — Both the true and bastard Peripneumony up and down: A convulsive Cough very frequent among Children; this indeed oftentimes rages very severely after the Measles, nor is it scarcely ever to be checked, unless the inflammatory Disposition is removed by Bleeding, and the acrid Colluvies carried off by gentle Purgatives, an easy Puke, and mild Cathartics, observing at the same Time a soft, diluting, and regular Diet. The Practice of old Nurses, in giving Persons Flesh, or Fish, as soon as ever the

the Measles are over, is of the most dangerous Consequence, since this is generally attended by a peripneumonic Fever.

Numbers were seized with a violent Angina, with a very acute Pain in the Ears, to which were also frequently added a Parotis, or an Abscess in the Fauces; nay sometimes a Phrensy, and sudden Suffocation. I knew of two or three who very suddenly were taken off, that were as if they had been thunder-struck, and quite stupid; whose Voice was at first most surprisingly shrill, but very soon was quite stopped: One of these swallowed down whatever was offered him, much more easily than any one would imagine. This dreadful Symptom is always most greatly to be feared, as it denotes an Inflammation of the *Arytænoide* Muscle, and the upper Parts of the *Aspera Arteria*; hence, the Opening of the *Glottis* being quite shut up, the Breath is immediately suppressed, and this shrill Noise is the diagnostic Sign of such an Inflammation.—In this fatal Disease, seasonable *Bronchotomy* sometimes snatches a Patient from the Jaws of Death: This itself nevertheless is altogether vain, and the Undertaking unsuccessful, after that an Inflammation has actually seized the Lungs, as is evident from fatal Experience. The chief Symptoms of this are an Oppression at the Breast, a very great Anxiety, constant Difficulty of Breathing, and, as

is

it were, a short, suffocating Cough. However this Operation (provided that you have a good Artist) is not so very much to be dreaded, it being as easy to be performed as the Opening of a Vein.

Nay, I remember, about thirty Years since, a certain Apprentice to a Surgeon being most desperately in Love with a young Girl, who three or four Times so wounded the *Thyroidean Cartilage* with a Penknife, that the Wind issuing from thence would extinguish a Candle. The Surgeon, who was his Master, was exceedingly busy in stitching up the Wounds; but, upon my being called in, I advised him to desist from what he was about, and rather, having tied the young Man's Hands to a little Bed, to prevent him thereby from making any fresh Attempts upon his Life, and having then only well covered over the Wounds with a Sticking-plaister, he was easily cured.

If there is ever any Necessity for Caution and Expedition together, it is so in the suffocating Angina; a melancholy Proof of which I formerly met with in a particular Friend. — He was near sixty, active, ruddy in his Countenance, and almost every Day delighted in the Use of the Cold-Bath: — One *Saturday* Morning, having used the Cold-Bath, as usual, after Noon being seized with a violent Shivering, he was almost frozen, and soon after grew most
excessively

excessively hot ; presently came on an intolerable Burning in the *Fauces*, and a most acute Pain.—In the Evening he was blooded ; about Midnight, being sent for to him, I ordered $\frac{3}{4}$ xvi of Blood to be drawn, an emollient Clyster with a good deal of Sea-Salt to be injected, Manna, Crem. of Tartar, and Nitre, in some laxative Decoction, to be given him largely, very large and very stimulating Blisters to be applied to his Neck. A *Sunday* Morning every Thing appeared much worse, so that the swallowing down any Thing, whether liquid, or solid, much less a sufficient Quantity of Manna, &c. to give him a Stool, was almost impossible. Upon this ten Ounces of Blood were drawn off, by Cupping him upon the Neck and Shoulders, and Blisters applied to the Scarifications, a stronger Enema was also administered ; but, notwithstanding all this, the Malady was not any Way abated ; nay, his Voice now became much shriller, and now and then even quite suppressed. Upon this Account I suggested something about *Bronchotomy* ; however, as those who were present muttered amongst themselves, that this was the Way to destroy the Person, and not to save him, and I was also myself at that Time a young Physician, I was timorous, and desisted from the Operation, lest I might have been thought to have killed my Patient, if I had not by that Means saved him :

A Vein

A Vein therefore was again opened, and the Enema again repeated : There was now much less Difficulty in Swallowing, and also less Pain, the Voice was nevertheless still exceeding * shrill, and now and then quite stopped ; moreover the greatest Difficulty likewise in Breathing, the highest Anxiety upon his Spirits, the Pulse exceeding fluttering, and oftentimes quite intermitting, with a coldish Sweat.—I now heartily repented of my having omitted Bronchotomy, being at length sufficiently certain, that the Lungs were now overwhelmed with the Disease, by a fatal Translation of it upon them. Whilst I was farther deliberating what was still to be done for the worthy Man, he imperceptibly † voided a Stool, and, being immediately after seized with a Convulsion of the Nerves, expired within six and thirty Hours from his first Seizure.

It is generally a very fatal Event for the Angina, and Swelling of the Fauces, at once to vanish, at the same Time that the Difficulty of Breathing is increased ; and this is taken Notice of by ‡ *Celsus*, from *Hippocrates*, “ si An-

* Ὀξύφωνή κλαυθμώδης, πονηρόν. Lib. 1. Prorrhætic. Sect. 6.

† "Οἱσι διὰ σφοδρότητα πνιγμῶν κόπριον ἐξαπίνης διαχωρεῖται θανάσιμον. Coac. Prænot. 7, Cap. de Anginâ, ex Edit. Duretî.

‡ Lib. 2, Cap. 7.

“ gina subito finita est, in Pulmonem id malum
 “ transit, idq; sæpe intra diem septimum oc-
 “ cidit.” — Indeed, much sooner than the se-
 venth Day, provided that the Disorder falls
 upon the Larynx, and the muscular Fibrillæ
 of the Trachea, upon the first, second, or third
 Day; and this is agreeable to the Observation
 itself of the divine Old Man, *Lib. Prognostic.*
 and also *Coac. Prænot. 1, Sect. de Angina, Edit.*
Dureti; nay, according to the Remark of
 * *Aretæus*, even upon the very same Day; nor
 is this surprising, since by this the Breath is
 shut up, and also the Circulation of the Blood
 thro’ the Lungs. — Hence therefore our ut-
 most Endeavours should be used, that the Tu-
 mour should be made to tend outwards, by the
 Application of very acrid Cataplasms, and even
 by laying on a very stimulating Blister to the
 fore Part of the Neck; which, altho’ it is not
 usually done, is a very safe, as well as an effi-
 cacious Remedy. Nor indeed is the Advice
 of † *Celsus* to be slighted, “ Incidere satîs al-
 “ tis Plagis sub ipsis Maxillis, supra Collum,
 “ & in Palato circa Uvam, vel eas venas, quæ
 “ sub linguâ sunt, ut per ea vulnera Morbus
 “ erumpat.” The same Method is I find also

* See *Aret. de Morb. acut. Lib. 1. Cap. 7*, where a very accurate Description, and Distinction, as to the Angina, is to be met with.

† *Lib. 4, C. 4.*

approved

approved of by *Cælius Aurelianus*, however gently the *Methodists* treated their Patients. The Opening the Veins under the Tongue in an Angina oftentimes proves highly beneficial; but, should these (by the Disorder's running very high, and also the Fever) not afford a sufficient Quantity of Blood, a proper Quantity should be beforehand taken from the Arm, and, as * *Aretæus* rightly advises, from a large Orifice, and even to Fainting, in order that thereby the Violence of the Inflammation may the sooner be removed, which might else in a very short Time suffocate the Patient. Besides all this, in more dangerous Cases I ordered Cupping-Glasses to be laid upon the Neck, and the Shoulders, after their having been first scarified, (nay † *Cælius Aurelianus* would have it done on the Occiput, the Legs, and also the Breast) and afterwards to apply Blisters to those very Places: For indeed, where there is such exceeding great Danger, the Life of the Patient determinable in so short a Space of Time, and where frequently so little is to be effected by any Medicines taken in by the Mouth, nothing should be omitted: Laxative Clysters therefore, with some stimulating Salt, such as Sea-Salt, or the common Cathartic, are also now and then to be injected; — not that it is improper,

* De Curatione Anginæ.

† Lib. 3, Cap. 3.

if it can immediately be done, upon the first Seizure, to administer cooling Purgatives, nitrous and emollient Diluents freely, at Times also constantly drawing up a warm relaxing Vapour, and washing out and cleansing the Fauces with some Liquor : However I by no Means approve of frequent and violent Gargles, as these increase both the Pain and also the Inflammation.

There is nevertheless some Kind of Anginas, wherein Gargles, and those too very sharp ones, are of great Service ; as in those which are attended with a salt and phlegmatic Defluxion upon the *Fauces* and *Pharynx*, which are swoln greatly, look whitish, and are covered over with a good deal of Mucus, where however there is but a small Fever, yet a very great Difficulty in Breathing, and also a great Obstruction in Swallowing. In such a Case indeed there is no Occasion for drawing much Blood, but for *Blisters* and *Cathartics* ; *Aretæus* even advises *Elaterium* ; we have, notwithstanding, much milder, but sufficiently efficacious Purgatives. In the mean While, Mustard-Seed, boiled with Honey and Vinegar, makes a proper Gargle, and yields a very useful Steam, which surprisngly draws out the Colluvies. — All these Things however are intirely to be avoided, where there is a great Inflammation : For here a Decoction of Figs and Nitre,

Nitre, boiled in Milk and Water, is a far better Gargle, as well as a safer, and even the Drinking of it is far from being unserviceable.

So much for the Angina; of which, as there are various Kinds, so they require a * different Method of Treatment: That, nevertheless, which succeeds Diseases of long Continuance, or slow Fevers, where there is no external Tumour, nor any Thing conspicuous in the *Fauces*, but they appear in some Measure dry and pale, will not admit of the Loss of Blood and Purging, and no-way indicates it: On the contrary, it requires proper *Cardiacs* and a restorative Kind of Diet; since by these (if by any Thing) this Malady is remedied.—In general, however, this is the certain Fore-runner of Death.

F E B R U A R Y.

Full Moon the 12th. New Moon the 26th.

The Barometer stood high this Month, notwithstanding the Wind was frequently south-westerly, and a good deal of Rain fell: The very great Density of the Atmosphere however seems to have kept up the Mercury; besides which, the Wind was often north-westerly, and sometimes easterly. Scarce any Frost this

* For this consult *Celsus*, Lib. 4, C. 4; and also *Aretæus de Morb. acut.* Lib. 1, C. 7.

Month, or the preceding ; but the Atmosphere was always exceeding dense and humid.

Rain $\frac{1}{1}$ 1. $\frac{1}{3}$ 3. $\frac{1}{5}$ 5. 6 — 8. $\frac{1}{9}$ 9. $\frac{1}{10}$ 10. 11. 13. 14.
 17. 18. $\frac{1}{19}$ 19. $\frac{1}{26}$ 26. $\frac{1}{27}$ 27. 28 = 2.876. Dig. Dec.

A very great Halo about the Moon the 5th, H. 9. p. m. — A great *A. B.* the 23d, H. 7. p. m. E. 1.

Greatest Height of	8	23, 30.3, E. 1.	} Mean Height
Least	—	19, 29.4, S. S. W. 1.	
Coldest Day	6, 59,	N. W. b N. 1 ^x .	} Mean Height 51 $\frac{1}{2}$ $\frac{5}{8}$.
Warmest	27, 47,	S. W. b W. 3 ^x .	

Ophthalmies, Pleurifies, and Peripneumonies here and there. Swellings of the Neck and Fauces, with a most acute Pain of the Teeth and Ears, were very common : Now and then Imposthumes arose in the Auricular Meatus, or in the Tonsils, and also now and then very tedious and painful Swellings, which sometimes suppurated.

The Rheumatism and Gout exceeding rife, and a great Number of Small-pox.

The pustulary Measles, and those very prominent, were now very epidemic ; but, I know not how, they were more fatal in their Effects than even those which were merely spotty : For a violent Cough and perpetual Sneezings, with a very great Defluxion from the Eyes and Nostrils, came on at the very first, immediately after

after a burning Fever, generally attended with a Delirium, and a violent Oppression of the Præcordia, which became much more violent in the State of the Disease ; so that at that Time it very frequently became altogether a *peripneumonic* Affection.

Hence came on a Stupor, or very violent *colical* Pains, and oftentimes a Dysentery : The Cough however always grew more violent, which frequently occasioned the Spitting Blood, by bursting some small Vessel in the Lungs ; sometimes indeed a good deal was discharged thro' the Nostrils. — Bleeding equally relieves the *Colic*, and also the *Peripneumony*, and therefore is absolutely necessary, and without it scarce any Thing proves effectual : Afterwards mild *Cathartics* happily purge off the Relics of the Disease, provided a sparing and proper Course of Diet be observed. This Disorder proved fatal to Numbers of Children, who were carried off by the violent Inflammation of the Lungs, a slow Consumption, or a most incessant Cough. — Those who upon the Approach of the Disease had complained greatly, and for a considerable Length of Time, of a * Weariness in the Limbs, and great Pain, suffered exceeding much ; a Thing which I have likewise very often noted in the Small-pox. Does

* ὀρεονόπος. *Hippocrat.*

this Symptom indicate an Acrimony in the Humours, or else only the Forcing of the sanguineous Globules into the smaller Vessels, which are only fit to convey the proper Serum of the Blood?

M A R C H.

Full Moon the 14th. New Moon the 28th.

Both in the Beginning and End of *March* the Barometer was high. The Wind also being during the whole Month easterly or northerly, there was, for the most Part of it, fair Weather: But between the 14th and 25th, the Mercury falling, there was much Snow, frequent Rain and Hail, and a cold Season. A severe Frost the 18th and 19th, N. E. 1.

Rain 6. $\frac{1}{14}$. 18. 21. 22. $\frac{111}{23}$. 24. — Snow
11. 15. $\frac{1}{16}$. $\frac{1}{18}$. 20. — Hail 17. $\frac{1}{22}$. = 1.5 12. Dig. Dec.

A great *A. B.* the 1st, H. 10, p. m. N. E. 1.
— A large variegated one the 15th, H. 7. N. b W. 2^x; nevertheless the greatest Part of it was of the Colour of a red-hot Iron, the lucid Rays of which darted from the S. W. and S. E. There was again another very great lucid variegated *A. B.* the 30th, H. 10. N. b. W. 1; the Center of the Corona (as it is called) unquestionably diverged to the eastern Part of the Meridian-Line, to almost 15 Degrees, and declined

clined as much at least from the very Zenith to the South.

Greatest Height of	☿	30, 30.4, N. b W. 1.	} Mean Height
Least	————	22, 29.1, E. S. E. 2.	

Coldest Day	16, 66, N. b W. 2.	} Mean Height 55.
Warmest	31, 46, N. b W. 1.	

The Measles still epidemic ; Small-pox, Ophthalmies, Pleurisies, and several Peripneumonies ; nor did all these Disorders rage here only, but every-where. — *Convulsive*, violent, and suffocating Coughs often followed the Measles and Small-pox, which indeed made great Havock. — When the Cuticle scaled off well, the 4th Day from the Eruption, and was as if covered over with coarse Bran, Things were then in a very hopeful Way ; but, when the Pustules were very livid and dark, there was but very little Hope. At such Times Blisters were to be applied freely, and warm Frictions to be used all over the Body ; in the mean Time also warm White-wine Whey was to be supped up freely, adding to it (if the Pulse was languid) a few Drops of Sp. C. C. — Rheums, Hoarsenesses, Swellings of the Fauces and Neck, almost seized every body ; not a few also were laid up in the Angina, which nevertheless was for the most Part mucous ; nor attended with any great Fever, nor any considerable Difficulty of Breathing : The Ancients called this Sort of Angina *Parasynanche*. However, as
this

this depends upon too large a ferous Colluvies of Matter, it is more easily diffused by gentle Sweats, Blisters, and Purgatives, than by plentiful and repeated Bleeding; however prudent it may be, in the very Beginning of the Disease, to open a Vein. In this Case also deterging and more acrid Gargles are serviceable, in which it will be serviceable to mix also something of an Astringent: For frequently we deal too much in *Emollients*, where a ferous Defluxion, as it were, deluges the Fauces by its inviting more Matter there also. A quite different Method of Treatment however ought to be used, where a pestilential *Cynanche* attacks any one; for here there is commonly a most acute Fever, the Countenance is red and swoln, to that Degree indeed, that it sometimes becomes even livid, the Eyes are wild and inflamed, the Temples throb and have a great Pain in them. This is soon succeeded either by a Phrensy or a sleepy Stupor, and a vast Difficulty in Breathing; nay, unless in an erect Posture, scarce any Respiration at all; and the Patients were immediately suffocated, unless relieved by a speedy, large, and plentiful Bleeding.

APRIL.

A P R I L.

Full Moon the 12th. New Moon the 26th.

The north-east Wind prevailed chiefly this Month, the north-west intervening now and then, sometimes also the south-east, which made the Season very cold. Snow, Hail, and Frost often in the Beginning of this Month; towards the End, the Wind being southerly, there was Rain.

Rain 1. 2. $\frac{1}{7}$. $\frac{11}{11}$. 15. 21. 22. 24. 25. 26.
 $\frac{1}{27}$. $\frac{1}{28}$. $\frac{1}{29}$. — Snow 3. 4. 8. $\frac{1}{9}$. — Hail 8.
 Dig. Dec.
 9. 10.—A sharp Frost the 5th, N.E. 2. = 1.698.

A great flame-coloured *A. B.* the 20th, H. 9,
 E. N. E. 3.—A Storm the 8th, N. N. W. 4x.

Greatest Height of ☽ 11, 29.8, N. E. 2. } Mean Height
 Least ——— 24, 29.1, S. E. 2. } 29.4 $\frac{2}{3}$.

Coldest Day 5, 6, N. E. 2. } Mean Height 50.
 Warmest 30, 44, S. W. b S. 2. }

Ophthalmies, Pleuro-pneumonies, Quinsies, exceeding common, and much more violent than usual. The Small-pox very rife, and the Measles also were much more epidemical, as well as more fatal.—The Children were seized with a most terrible Cough, and frequently had no small Fever, and it was with great Difficulty that they could pump up the glutinous Phlegm;
 by

by which Means several were seized with a Convulsion of the Nerves, but were relieved by Bleeding, and the Use of *Oxymel. scillit.* with the Juice of Millepedes, &c. This Season was very fatal to consumptive Persons. A tedious and troublesome Thrush, and obstinate Ulcers in the Fauces, frequently attended those that had * Fevers: To such as were hectic, or consumptive, they are always the sure and speedy Pre-
sages of Death.

Some Tertian Fevers, with severe Fits of the Gout and Rheumatism.

M A Y.

Full Moon the 12th. New Moon the 26th.

In the Beginning of the Month, the Wind being southerly, there was a great deal of Rain. From the 13th the Wind was often easterly, bye-and-bye south-easterly, then north-easterly, and sometimes north-westerly. — The 15th we had Lightning, Thunder, and Rain, the Wind shifting every Hour to every Point of the Compass. The 16th there was a strong north-east Wind, but no Rain; in the Night however a vast Quantity fell, also, between Eleven and Twelve the 17th at Night, a whole Inch fell, without the Barometer's falling the least at the same Time. The north-east Wind

* Φάεργς ἐλαχμίνη, συν πυρετῷ δεινόν. *Hippocr. Prognost.*

continued to the 19th; afterwards the Wind was variable, and now and then Flashes of Lightning. At the Conclusion we had the north-east Wind again, which, contrary to what is usual, was generally in this Month warmer than the south.

Rain $\frac{1}{1}$. $\frac{1}{2}$. $\frac{1}{3}$. $\frac{1}{5}$. $\frac{1}{7}$. $\frac{1}{9}$. $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{15}$. $\frac{1}{17}$. 18.
 $\frac{1}{19}$. 24. 30. = 3.210.
 Dig. Dec.

A Storm the 2d at Night, S. S. E. 4x. —
 Lightning and Thunder the 18th.

Greatest Height of ☿ 25, 30.0, N. E. 1. } Mean Height
 Least ————— 10, 29.2, S. S. W. 3. } 29.5 $\frac{2}{9}$.

Coldest Day 2, 47, S. b E. 3x. } Mean Height 38 $\frac{7}{9}$.
 Warmest 27, 28, E. N. E. 1. }

Ophthalmies, Quinsies, Pleurifies, Peripneumonies, both true as well as spurious, common: Small-pox, Measles, and miliary Fevers up and down. Several Children were plagued with a convulsive Cough, and some were immediately suffocated by it. More People than usual laboured under an * *Empyema*, arising from an ill-judged Treatment of a Pleuropneumony, an Abscess sometimes breaking in the Side, and frequently in the Lungs. Those who freely expectorated a purulent Matter escaped; but, where it was otherwise, the Lungs

* About the Symptoms of an *Empyema*, consult *Hippocr.* Prognostic. and his Book de Locis in Homine, Sect. 28.

were soon consumed, a great Hoarseness and Soreness in the Throat coming on.—An Hoarseness indeed, and that a very obstinate one, is apt to seize consumptive Persons, which truly is very justly placed among the Symptoms of a confirmed Phthisis; nor indeed, if Aphæ or Ulcers in the Throat should be joined to it, is Death far off: So greatly is an Hoarseness to be dreaded in Disorders of the Lungs, especially if the expectorated Matter be greenish, or has the Appearance of Mud.

J U N E.

Full Moon the 10th. New Moon the 25th.

An unfavourable, rainy, cold Season for almost all *June*, the Wind being generally westerly, and now and then veering to the South, often likewise to the North.

Rain 1. 2. 5. 6. 7. 9. 10. 11. 15. 18—20.
 23. 24. 25. 26. 27. 30. = 4.218. Dig. Dec.

Lightning and Thunder the 5th at Night.—
 A small Storm the 26th in the Morn. S. S. W. 4x.

Greatest Height of	8	16, 29.8, N. N. W. 1.	} Mean Height
Least	10, 29.0, S. S. W. 3.	29.4 $\frac{1}{3}$.	
Coldest Day	3, 38.	N. b E. 1.	} Mean Height 32 $\frac{2}{3}$.
Warmest	29, 27,	W. N. W. 1.	

The Small-pox and Measles still common:
 Compound (as they are styled) military Fevers
 not

not uncommon. Many were tormented with the Rheumatism and Pain of the Side; nor were a few seized with a Peripneumony, but generally the spurious. A most violent Cough up and down amongst the Children, which was scarcely ever quieted unless by frequent Vomits and repeated Doses of Rhubarb; after which the Decoction of Cortic. Peruvian. soon drove it off.

J U L Y.

Full Moon the 9th. New Moon the 24th.

The cold and wet Season still continued, the Atmosphere being generally very dense and cloudy; we had by far too much Rain, by which the Fruits of the Season became crude and insipid. The reigning Wind was westerly, often veering to the South, but more frequently to the North. Sometimes indeed a north-east Wind intervened, and sometimes a dead Calm. — Exceeding few Butterflies, and scarce any Grasshoppers.

Rain	$\frac{1}{1}$	3	—	5.	9.	$\frac{11}{10}$	$\frac{11}{11}$	$\frac{11}{12}$	$\frac{11}{13}$	14.	15.
	$\frac{11}{18}$	25.	$\frac{11}{27}$	28.	29.	$\frac{1}{30}$	$\frac{11}{31}$	Dig. Dec.			
	= 3.172.										

Lightning and Thunder the 12th, a. m. a dead Calm.

Greatest Height of ☿	20, 30.1, N. b W. 1 ^x .	} Mean Height
Least	11, 29.2, W.S.W. 2 ^x .	
Coldest Day	13, 40, N. N. E. 1.	} Mean Height 31 $\frac{9}{29}$.
Warmest	23, 24, a Calm.	

The Small-pox still epidemic, but however not very fatal. Some Measles, and a very severe convulsive Cough. — A Kind of Angina, attended with Aphthæ, continued a long Time, which affixed itself to almost all acute Diseases, but especially to those of a pustulary Nature; and at present also it tormented those in Peripneumonies. — Indeed it is a very troublesome and frequently a very dangerous Symptom, when in a Fever the Membrane of the Fauces is inflamed, and invested with Pustules; since a few Small-pox in the Streights of the Fauces do infinitely more Mischiefe than a thousand upon the external Parts.

AUGUST.

Full Moon the 7th. New Moon the 23d.

The Beginning of *August* was very favourable, but the latter End of it very unfavourable; there being almost a continual Fall of Rain, which very considerably damaged the Corn. Besides, the Atmosphere, which hitherto the 20th was tolerably dry, became now exceeding dense and moist, the Wind in the mean Time being south-westerly; whereas, in the

Beginning

Beginning of the Month, it was chiefly north-west.

Rain 1. 2. 5. 6. $\frac{1}{12}$. $\frac{1}{21}$. $\frac{1}{22}$. $\frac{1}{23}$. $\frac{1}{24}$. 25.
 — 27. $\frac{1}{28}$. 29. $\frac{1}{30}$. 31. = 2.016. Dig. Dec.

Lightning and Thunder the 23d.—A very large fiery Halo about the Moon the 5th, H. 10, p. m. W. 1^x.—A Storm the 21st at Night, S. S. W. 4^x.—The 24th, at Night, S. W. 4^x.—The 26th, at Night, S. W. 4.

Greatest Height of ☽ 18, 30 0, N. 1. } Mean Height
 Least ——— 29, 29.2, S. W. 6 W. 3. } 29.6. $\frac{2}{35}$.

Coldest Day 31, 42, W. N. W. 2^x. } Mean Height 31 $\frac{1}{35}$.
 Warmest 15, 20, N. N. W. 1^x. }

The Small-pox epidemic; the convulsive Cough also still common, especially in the hither Part of *Cornwall*.—Quinsies, and bastard Peripneumonies, up and down, and those with the Eruption of several red and watery Pustules at the State of the Disease, which generally proved salutary. — Numbers were now afflicted with the Rheumatism, which was at present more successfully relieved by Cathartics, than by Bleeding.

A great Languor depressed every-body; Nay the small Singing-Birds themselves were dejected; and the Grasshopper itself was mute.

S E P T E M B E R.

Full Moon the 6th. New Moon the 21st.

A rainy and cold *September* moreover succeeded; a violent south-west Wind frequently blowing in the Beginning of this Month, but, after the 16th, a south-east most commonly, a Calm sometimes intervening.—Great Quantities of Corn, being beat down by the Rains, were quite destroyed.

Rain $\frac{''' }{1.}$ $\frac{'}{3.}$ $\frac{''}{5.}$ $\frac{''}{6.}$ $\frac{''}{7.}$ 8 — 10. $\frac{'}{11.}$ 12. 15.
 $\frac{'}{17.}$ $\frac{''' }{19.}$ $\frac{''' }{20.}$ $\frac{''' }{21.}$ 22. 26. $\frac{'}{27.}$ 28. 30. = 3.452. Dig. Dec.

A small Storm the 3d at Night, S. W. 4x.
 —A great one the 10th at Night, S. W. 4x.—
 The 11th, a. m. W. S. W. 4.—Thunder and Lightning the 7th at Night. — Lightning, without Thunder, the 10th in the Evening.—
 The 21st in the Evening continual Lightning, without Thunder also, from 6 p. m. to Midnight, and beyond it.—A. B. the 12th and 13th, at 8 p. m. N. W. b N. 1.

Greatest Height of ☿ 14, 29.8, N. N. E. 1. } Mean Height
 Least ————— 11, 29.0, W. S. W. 4. } 29.5 $\frac{3}{10}$.
 Coldest Day 14, 48, }
 Warmest 22, 32, S. S. E. 1. } Mean Height 38 $\frac{2}{3}$.

The Small-pox scattered every-where, but in this Place they were pretty favourable, altho' in others they were often fatal. Convulsive

five Coughs were as yet also common; slow nervous, and miliary Fevers here and there, and also some putrid and intermittent ones.

The Jaundice and Dropsy frequently with united Forces carried off Numbers. Coughs in Abundance, and also Swellings of the Neck and Fauces, the Parotids, and also the Cheeks, accompanied with a slight Quinsy, were everywhere very troublesome.

O C T O B E R.

Full Moon the 5th. New Moon the 21st.

From the last Day in *September*, to the very 22d of *October*, the north-east Wind blew constantly; which occasioned a Rise of the Barometer, and a dry Season; and moreover, between the 14th and 23d, a very cold one. At the Close of the Month a rainy, south-east Wind raged. A severe Frost the 18th.

Rain $\frac{1}{2}$. $\frac{1}{2}$. $\frac{1}{2}$. $\frac{1}{2}$. $\frac{1}{2}$. $\frac{1}{2}$. 28 — 31.

Dig. Dec.

—Hail 28. = 1.516.

A Storm the 29th. — the 30th, S. E. b S 4.
—A. B. the 19th, H. 8, p. m. E. N. E. 1.

Greatest Height of	8, 30.3, E. N. E. 2x.	} Mean Height
Least	31, 29.1, S. E. 3x.	
		29.7 $\frac{2}{3}$.

Coldest Day	18, 65, E. N. E. 2.	} Mean Height
Warmest	1, 44, N. N. E. 1.	
		52 $\frac{1}{2}$.

The Small-pox now reigned every-where, but in general they were much milder. Some

putrid Fevers, some intermitting, or rather remitting, which were easily removed by gentle Eccoprotics, and the Use of a saline Draught now and then, with a small Quantity of Cort. Peruvian.—Ophthalmies, Quinsies, Rheums, and moist Coughs, exceeding ripe: Pleurifies and Peripneumonies, both of the true and bastard Kind, common.

A bastard Pleurify is generally nothing else than an Attack upon the external Muscles of the Breast, and is, as it were, a Species of *Rheumatism*; but, when the *Periostræum* itself of the Ribs is inflamed, there is often a very violent and obstinate Pain, which frequently very considerably † obstructs the Respiration.—But this is very easily removed, when there is a soft Pulse, by proper Fomentations and mild Cathartics.

N O V E M B E R.

Full Moon the 4th. New Moon the 19th.

In the very Beginning of the Month, a violent south Wind blowing, we had a very heavy Rain; from the 6th to the 10th a very cold north-east Wind prevailed, presently a south-east, which continued home to the 17th; this was also cold, and often cloudy, and attended with Rain. The 21st in the Evening we had a terrible Storm, a south-west Wind blowing

† See the *Essay on Fevers*, Chapter on the *Pleurisy*.

most furiously, and a large Quantity of Rain also falling. This continued for almost three whole Days, when there was a very great and indeed a very unusual Fall of the Barometer, and the Sea-Tides * immense; however, at the Close of the Month, a north-west Wind raised the Mercury again.

Rain $\frac{''' }{1.}$ $\frac{'}{3.}$ 4. 5. 7. 8. $\frac{'}{11.}$ 12. $\frac{'}{13.}$ 14. $\frac{'}{15.}$
 $\frac{'}{17.}$ 19. 20. $\frac{''' }{21.}$ $\frac{''' }{22.}$ $\frac{'' }{23.}$ $\frac{'}{24.}$ 25. $\frac{'}{26.}$ $\frac{'}{27.}$ 28. $\frac{'' }{29.}$

Dig. Dec.

— Hail 23. and 29. = 4.574.

A small Storm the 12th at Night, S.E. b S. 4^x.

— A Storm the 21st in the Evening, S. S. W. 4.

— All Day the 22d, S. W. b W. 4^x. — The 23d in the Morning, S. W. 4. — Thunder and Lightning the 21st at Night. — The 23d, ditto.

Greatest Height of ☽ 14, 30.1, S.E. b E. 3. } Mean Height
 Least ——— 23, 28.2. } 29.4 $\frac{1}{2}$ $\frac{2}{8}$.

Coldest Day 10, 70, N.N.E. 1, a severe Frost. } Mean Height
 Warmest 1, 48, S. 3. } 58 $\frac{1}{3}$ $\frac{9}{6}$.

Pleurisies and Peripneumonies, both true and spurious, not uncommon, nor nervous and miliary Fevers, especially in *Cornwall*: The convulsive Cough common amongst Children. Quinsies, and Tumours of the Fauces, Parotids, and Cheeks, which often suppurated, both inwardly and outwardly, were every-where common.

* Concerning these, consult Vol. I, Page 19.

The Small-pox were epidemic here, and all around, and were also now of a much worse Kind, being frequently attended with livid and black Petechiæ, often quite sunk in and blackish; sometimes altogether void of Matter, and oftener a little turgid with an exceeding sharp and crude Ichor. Many were indeed killed by them, and those who escaped were frequently plagued with a great many very troublesome Boils and Ulcers.—Frequently in the first Days of the Disease there came on an immense Salivation, and that exceeding thin and acrid, which ulcerated the Fauces, and the Mouth all over. I always indeed suspect this premature and crude * Flux, as it generally proves very tedious and painful to the Sick, and altogether prevents their sleeping; by which Means the Pustules neither mature favourably, nor are they well filled. Moreover this also indicates a great Acrimony in the Blood, which is likewise frequently denoted by vast Sneezings, and prodigious Defluxions from the Eyes and Nostrils: For this Reason, these are justly reckoned among the bad Symptoms.—To the Removal of which Evil, and to the Cure of it, nothing appears to be more effectual than a seasonable Application of Blisters between the upper Parts of the

* See the *Essay on Fevers*, Chapter of the *Small-pox*, Page 145.

Shoulders, and behind the Ears, which serve to drain off the sharp Humours.

D E C E M B E R.

Full Moon the 4th. New Moon the 19th.

The Weather in this Month was altogether surprising: In the Beginning of it we had a north-east Wind, and a severe Frost; presently a rainy and turbulent south Wind; in a very short Time after, a south-westerly, and a great deal of Rain, the Barometer nevertheless rising. The 14th and 15th the Wind was north-west; the 16th, north-east, and a Return of the Frost; the 19th and 20th, a violent south-east; on the 21st, again a stormy south-west; from that an easterly to the 28th, a cold north-east Wind intervening, the 25th and 27th; then a most severe Storm from the East, with an exceeding severe Frost, and a constant exceeding small Snow, to the very End. In an Instant a most piercing Cold froze up every Thing, both within Doors and without; nay, the very strongest Kinds of Wine were frozen; indeed whatever was exposed to the Air, instantly turned into Ice. People even shivered by the largest Fire's-Side, nor could keep themselves warm in their very Beds; indeed so very greatly were we benumbed by the excessive Cold, that we seemed scarcely alive. A most violent Storm at the Close of *December*

carried off a great Number of Birds, both small and great, from the Land, and drove them to a vast Distance from Shore, which, being quite tired with their long Flight, be- took themselves to those Ships which were in the Midst of the Ocean, and were easily taken by the Sailors : “ Mirum utiquè Genus aucu- pii ! ” — Nay, in the Beginning of the *January* following, I myself, accidentally going on Board his Majesty’s Ship the *Weymouth*, to see the Earl of *Deloraine*, who then lay sick, saw a Pie made of small Birds, which the Sailors, in their Return from *Lisbon* to our Port, had taken far, and far enough, from any Land.

Rain $\frac{''}{3}$. $\frac{''}{4}$. $\frac{'''}{5}$. $\frac{'}{6}$. 7. $\frac{'}{8}$. $\frac{''}{9}$. 10. 11. $\frac{''}{12}$. $\frac{'''}{13}$.
 $\frac{'''}{14}$. 15. 20. $\frac{'''}{21}$. $\frac{'}{22}$. $\frac{'''}{23}$. 24. = 4.102. Dig. Dec.

Much Rain the 21st, 22d, and 23d, altho’ the Barometer was at 30.1 ; besides, we had a very violent south-west Wind ; but the Air itself was exceeding thick and moist, an im- mense Quantity of Vapours being dispersed all over the Atmosphere. I was incapable of ex- actly estimating the Quantity of Snow which fell, being by the Impetuosity of the Wind blown out of the Receiver.

Greatest Height of ☿ 16, 30.2, N. E. 1. } Mean Height
 Least ——— 4, 29.1, S. S. W. 3^x. } 29.8.

Coldest Day in the Memory of Man,

Warmest — 31, 90, E. N. E. 4^x. } Mean Height
 10, 52, S. W. b W. 3^x. } 61 $\frac{26}{8}$.

Some

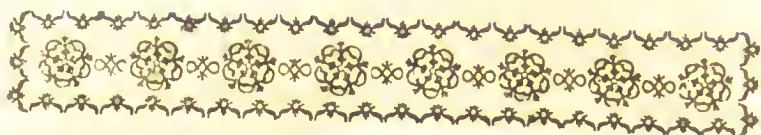
Some miliary and nervous Fevers, the Small-pox here and there, Quinsies and Ophthalmies common ; Coughs, Rheumatifms, Pleurifies, and Peripneumonies, frequent.

The whole Quantity of Rain, for the Year

Dig. Dec.

1739, = 36.308.





OF THE
 A I R,
 AND
 EPIDEMIC DISEASES,
 For the YEAR 1740.

JANUARY.

Full Moon the 2d. New Moon the 17th.

THE Severity of the Cold still continued, such, indeed, as was never known in this Country. Altho', on 1st Day of the Month, there was a very great Thaw, and a Fall of Rain, nevertheless the north-easterly Wind, and a most sharp Frost, instantly returned, which lasted to the very End of the Month; — and altho', by the Heat of the Sun, all Things were thawed by Day, yet by Night they were bound up by a most rigid Frost. The Atmosphere was generally very thick, and appeared as if covered over with

Smoak; but, between the 10th and 17th, exceeding thin. The coldest Days were the 11th, 15th, 16th, 17th, 18th, 26th, 27th, 28th; nay, so severe was the Frost, which now prevailed, that all Kinds of Wine, being exposed out of Doors, were immediately turned into Ice; nay, the very Salt-water upon the Shores was so; a Thing this which very seldom happens in these Parts. Innumerable Trees and Shrubs were cut off by the Cold, and even the very hardy Furzes themselves; indeed you could scarce see a green Herb. A vast Number of Sea-Birds flew hither, and Numbers from foreign Countries, which had never been seen here before.

Rain $\frac{''}{1}$. 2. 9. — Snow and Hail 8. 9.

Dig. Dec.

= 0.416.

I could not perceive any northern Lights all this Month, altho' the Wind was constantly northerly.

Greatest Height of ☿	14, 30.4, E. N. E. 2.	} Mean Height
Least	1, 29.1, S. W. 2.	

Coldest Day	26, 84, N. N. E. 1.	} Mean Height 75 $\frac{1}{3}$.
Warmest	31, 69, S. E. b E. 3x.	

The Small-pox, which were still epidemic, were commonly very small, pitted, and blackish, and frequently fatal: The Patients seized with them swelled but little, and had a very small Spitting, for want of which they were often

often suffocated on the 8th or 9th Day. It is almost constantly the Case, that, during a long Continuance of a dry and cold Constitution of the Atmosphere, Persons in the Small-pox † spit exceeding little ; for which Reason, when such a Season prevails, I would advise the Use of emollient Gargles, constant and repeated warm, relaxing Liquors, drawing into the Mouth also the Vapours of warm Water, or Milk, that, by these, the Fibres being relaxed, the Blood attenuated, the salival Ducts opened, and cleansed, a free Salivation may be brought on ; which in this Disease is a Matter of great Importance.

Swellings of the Fauces, Parotids, Tonfils, &c. seized almost every-body, and this also accompanied with a Cough and sharp Defluxion. Quinsies, Pains in the Teeth, Pleurifies, Peripneumonies, were rise every-where : Numbers also were plagued with Kibe Heels, which often came to Ulcers, and that even in grown Persons.

Slow Fevers, some nervous, some miliary. A violent Asthma now reigned much, which suffocated several elderly Persons. Many People, both in the Neighbourhood, and also in this Place, were attacked with Swellings of the

† See the *Essay on Fevers*, Page 145.

Fauces, Neck, and Head, and presently after with an acute Pain and Tumour of the Inguen and Testicles; this Complaint however was easily removed by Bleeding and a gentle Purge. —The Blood was often covered over with a yellowish Size, but that not very tenacious.

F E B R U A R Y.

Full Moon the 1st. New Moon the 16th.

This Month also was dry, and very cold; for altho', in the Beginning of it, a south-easterly Wind in some Degree moderated the Severity of the Winter, yet the north-east Wind with an exceeding hard Frost presently returned; at the Close, however, the Wind was southerly, which occasioned a rainy and much warmer Atmosphere. The Barometer stood high the whole Month: The Air was sometimes very thin, altho' in general very dense and smoaky, a Calm intervening now and then: Very often vast Hoar-Frosts, the Earth being by Day relaxed by the Heat of the Sun, and exhaling a great Quantity of Vapours, which the nocturnal Cold instantly condensed, and froze in the Form of an Hoar-Frost. —Nay the Sea itself, upon the Shores, was several Times frozen in this Month.

Rain

Rain 16. 19. $\frac{1}{26}$. $\frac{1}{27}$. 28. 29. — Some
Dig. Dec.

Snow 12. = 0.482.

An *A. B.* the 11th, H. 8, p. m. N. 1^x. —
Intense Cold the 14th, Thermom. 84.

Greatest Height of ☿ 23, 30.5, E. N. E. 1. } Mean Height
Least ————— 28, 29.8, S. W. 2. } 30.1 $\frac{2}{29}$.

Coldest Day 14, 84, E. N. E. 2^x. }
Warmest 29, 56, S. S. E. 2. } Mean Height 68 $\frac{1}{29}$.

Pleurifies, Peripneumonies, Quinsies, and Rheumatisms were very rife every-where. The Blood drawn from those Patients was very thick and fizy, with a little mud-coloured Serum. A great many laboured under a Cough, Catarrh, and severe Asthma; several also were troubled with a dry Ophthalmy. Vast Numbers, and even elderly Persons, were troubled with Kibe Heels, which were very painful, and sometimes ulcerated. Many were laid down in a kind of a catarrhal Fever, with an acute Pain and Giddiness in the Head, and sometimes a Phrensy. — Consumptive and asthmatic Persons suffered now greatly. — The Small-pox as yet here and there.

A nasty Itch was now universal amongst the lower Kind of People.

M A R C H.

Full Moon the 2d. New Moon the 16th.

The high Station of the Mercury still continued; the Air very dense, and generally cold;
frequent

frequent Calms, especially in the Beginning of the Month. On the 1st, the Wind being south-east, we had a great Fall of Rain; but afterwards it stood between north-west and north-east. A Frost frequently this Month, and a very great Hoar-Frost.

Rain $\frac{111}{1}$. 3. $\frac{1}{5}$. 7. 11. $\frac{1}{14}$. 18. 23. 26. 27.
Dig. Dec.
— Hail 12. = 1.278.

A most turbulent north-west Wind the 8th in the Morning.—A great *A. B.* the 12th, H. 9, N. N. E. 2.—A small one in the Evening of the 13th, N. N. W. 1.—The 14th, H. 9, N. W. 2. Indeed I have frequently seen *A. B.*'s for two or three Nights following, when the Wind blew from the North.

Greatest Height of \varnothing 30, 30.3, N. 1x. } Mean Height
 Least ————— 1, 29.7, S.E. b E. 1x. } 30.0 $\frac{4}{31}$.
 Coldest Day 13, 67, N. N. E. 1. } Mean Height 55 $\frac{1}{31}$.
 Warmest 18, 51, N. W. b N. 1. }

Quinſies and Swellings of the Fauces common ; ſeveral Rheumatifms, and often a very ſevere Gout ; the Small-pox ſtill. A very terrible Aſthma, and which continued for a long Time, plagued Numbers ; ſeveral died conſumptive.—Very many Pleuriſies and Peripneumonies ; but very ſeldom the Matter they expectorated was bloody ; indeed they ſcarcely expectorated any Thing freely and plentifully, which in this Diſeaſe is a Matter of moſt dangerous

gerous Consequence. The Blood which was drawn from all the pleuritic or rheumatic Patients, was very dense and tenacious, and had not a proper Quantity of Serum.

I know not how it was, but for several Months young Persons, and not a few even among the Adults, were troubled with round Worms, which were very often brought off in the Course of the Disease.—Was not this verminous Offspring owing to the bad Corn *, and to the unripe and crude Fruits?

A P R I L.

Full Moon the 1st. New Moon the 15th.

This Month was dry, and very cold, the Wind keeping generally between the East and North, a Calm sometimes intervening. We had Hoar-Frosts very frequently, and sometimes Ice. Home to the 15th, we had often Snow-Showers, and, after, Hail. The Snow continued upon the Mountains until the 26th of the Month.

Rain 8. $\frac{1}{12}$. $\frac{2}{13}$. 14. 25. 26. 29. — Snow
 Dig. Dec.
 20. 21. 22. — Hail 26. 27. = 0.802.

A slight Storm the 23d, p. m. N. N. W. 4x.

* See the Month of *August*, in the Year 1739.

Greatest

Greatest Height of	§ 17, 30.2, a Calm.	} Mean Height
Least	12, 29.3, E. 2.	
Coldest Day	14, 62, E. N. E. 2 ⁴ .	} Mean Height 51 $\frac{3}{4}$.
Warmest	19, 45, N. N. W. 2.	

The same Constitution of the Air remaining, the reigning Disorders were still the same, and now indeed were much more severe. Great Numbers died both in Town and Country.

Acute Disorders were now often attended with the *Petechiæ*, even in those who had Peripneumonies; but this happened chiefly amongst Sailors, whose Blood was not sufficiently compact, but rather putrid, and as it were livid, and the Serum of it either green, or exceeding turbid, as if a Quantity of Mud had been mixed with it: They immediately expectorated purulent, and very often very foetid Matter, owing this, perhaps, to the * Scurvy, which prevails both far and near, at least upon these Coasts.

The Small-pox up and down, and a most terrible Kind of Pleurisy, which suffocated Numbers, in the Manner of a Paraphrenitis, scarcely the fourth Day being elapsed from their Seizure; the Blood drawn from these Persons was mere Glue.

* See the *Essay on Fevers*, Page 211.

M A Y.

Full Moon the last.

New Moon the 14th. Full Moon the 30th.

The dry and cold Season still continued, the Wind being almost constantly easterly, inclining generally to the North, and sometimes also to the South ; frequently it was very violent, and bye-and-bye quite hushed, especially towards Night. The 5th, 6th, and 7th Days of this Month were uncommonly and amazingly cold, for this Time of Year ; nay, there was a considerable Fall of Snow upon the 5th.—The Atmosphere was very dense, altho' very little Rain fell.

Rain $\frac{1}{4}$. 5. 12. 14 — 17. 20. 23. 26. —

Snow $\frac{1}{5}$. — Hail 4. 5. 6. = 0.538. Dig. Dec.

A Storm the 25th, a. m. E. 4. — A. B. the 27th in the Evening, N.W. b W. 1.

Greatest Height of ☽ 9, 30.1, N.E. 1. } Mean Height
Least ——— 4, 29.3, N. N.E. 2^x. } 29.7 $\frac{1}{3}$.

Coldest Day 6, 62, N. b W. 2. } Mean Height 42 $\frac{2}{3}$.
Warmest 30, 32, a Calm. }

Pulmonary Fevers were yet very rife, and at present by far more malignant, being often also attended with a great Number of black, livid, and dark Spots. The Head and Back suffered most exquisite Pain, and there was a very great Oppression upon the Præcordia: There now also

also always came on a terrible Phrensy, and very often a Kind of ulcerous Angina even from the Beginning, which by Degrees invaded the whole Fauces. The expectorated Matter was either altogether crude, or sanious; the Urine crude, lurid, and turbid, which is always a bad Omen, and never had any Sediment: At the Close of the Disease there was sometimes an happy Eruption of Pustules and Blotches.—Very often this Disorder suffocated the Patients, from the dreadful Anxiety into which they were thrown, within a few Days, just as in a Paraphrenitis; nay, they were not uncommonly seized with an Hepatitis; for both the Situation of their Pain, and their jaundiced Countenance, and the very great Yellowness of their Urine, were plain Indications of this.

At this Time also a putrid petechial Fever was very rife, which sent a Number of Sailors, and the lower Kind of People, to their Graves.—These Fevers, *viz.* the pulmonary and petechial, seemed frequently to have been complicated, and to have raged with their united Forces.

The Small-pox were now more common, but in general milder, altho' the Spitting was but sparing. They were however mostly of the distinct Kind, which indeed seemed somewhat wonderful, since all other acute Disorders had something uncommonly malignant in them.

A violent Cough among the Horses, attended with a suffocating Quinsy and Fever, killed Numbers of them ; nay, the black Cattle were also often carried off by the same Disease.— The Sheep were exceeding thin, and troubled with a dry Cough ; — a vast many perished hereby, the Liver of all which was greatly swelled and indurated ; the Gall-Bladder, being turgid with a blackish Kind of Bile, was of an enormous Magnitude.

J U N E.

New Moon the 13th. Full Moon the 28th.

There was perhaps never known so exceeding a Drought as now ; the Springs were quite shut up, and even Rivers became intirely dry,

“ Pabula canescunt, cum Frondibus uritur
arbor.” OVID.

Altho' all Kinds of Hygrosopes denoted an exceeding dry Constitution of the Air, yet the Atmosphere was very dense, and appeared smoaky : — I know not from whence, unless it was from a Deficiency of a sufficient Moisture in the Atmosphere for the regularly transmitting the Rays of Light. — Thus we see some Bodies, which being wetted become pellucid, that being dry are quite opake. — An easterly Wind from the 1st to the 5th ; from the 19th again

again to the 25th; but, in general, a north-west, and often also a south-west, Wind blew.

Rain $\frac{''}{5}$. $\frac{'}{7}$. 8. 10. 11. 13. 24. ——— Much

Dig. Dec.

Hail 7, p. m. = 0.742.

Greatest Height of ☽ 18, 30.2, a Calm. } Mean Height
Least ——— 7, 29.3, S.W. b W. 3. } 29.7 $\frac{2.9}{2.3}$.

Coldest Day 12, 42, S.W. b W. 2. } Mean Height 33 $\frac{3}{8}$.
Warmest 25, 25, S.E. b E. 1. }

The peripneumonic Fever, which was very often accompanied with the Petechiæ, still continued.—The Blood drawn in this Disorder was very livid, nay and black in its Appearance, and the Texture of it generally too much * dissolved; frequently indeed it was altogether sanious.

The Small-pox were more common, but in general of a more favourable Kind.—A little Kind of Fever, with red and very angry Pustules, which broke out in the Beginning of the Disease, was very common; it was however slight in its Appearance, and soon vanished, leaving behind a great Roughness of the Cuticle.

The pestilential Fever amongst the Sailors

* In the epidemic petechial Fever, which *Ramazzini* has most accurately described, he always found the Blood to be of a Rose-colour, purple, dissolved, and to have very little Size in it. See *Ramazzini's* Constitution. Epidem. Ann. 169, &c. Sect. 27, 47.

was exceeding ripe :— Attend to the following History of it.

In the Beginning of the Spring, two Men of War (the *Panther* and *Canterbury*, the latter of which was just come from the *Mediterranean*) put into this Port ; out of these more than two hundred Sick were immediately brought ashore, the greater Part of whom were ill in a malignant, nay, in a pestilential, Fever ; and, from those the Contagion being also spread among the common People, it made most terrible Havock. — Nor was there sufficient Ground wanting to suspect, that those Ships had been infected by a Plague, which at that Time raged all over the *African* Coasts, as there was a frequent Commerce between them. — The Sick were at first seized with a slight Shuddering ; presently came on a sudden burning Heat, without any Regularity ; the Pulse in the mean While very variable, now exceeding quick, then amazingly sunk ; after this there came on immediately an Heaviness, or an acute Pain in the Head, often in the Occiput, frequently in the Sinciput, but more commonly in the Temples, or a little above the Eyes, which was by much more violent ; — nay the very Balls of the Eyes themselves were greatly pained, and could not bear the Light. In the mean Time there was a perpetual Drowsiness ; but very little kindly, refreshing Sleep ; with a very troublesome

some Tinkling in the Ears, or a violent Giddinefs. A very nafty and bitter Tafte alfo in the Mouth excited frequent Vomitings, and thofe very bilious, having a great Deal of Phlegm intermixed with them. The Tongue was almoft quite yellow, or brown, and foul, feldom however very dry, but rough in the Middle. Being now very foon debilitated, they took to their Bed, labouring however under great Anxiety, and as if quite terrified, the Pains now ranging here and there, all over their Limbs. Their Urine was thin, crude, watery, or lurid, often nevertheless of a fiery red Colour, appearing as if fome fmall Quantity of Blood had been intimately mixed with it, or fome very ftrong Lixivium: Thefe Kinds of Urine, always fparing in Quantity, and very thin, never deposite any Sort of Sediment:—I have remarked, that thofe were conftantly a very bad Omen.

Such was the State of Things in the very Beginning of the Difafe; but, after three or four Days, every Thing grew worfe and worfe: For now the Fever became more violently inflammatory; prefently there followed a Phrenfy, or reftlefs Coma, with a grim Countenance, and an Orange-colour Caft in the Eyes; perpetual Toffing in Bed, the greateft Anxiety, fo as to be fcarce tolerable to the By-ftanders themfelves; oftentimes a moft outrageous

Madness, often a small Kind of Dotage, every now and then talking wildly to themselves.

Violet-coloured, livid, brown, and even quite black Petechiæ, very often made their Appearance between the sixth and eleventh Day, sometimes sooner, sometimes later; the more florid they were, so much the better. However, dark, small, and numberless Spots in the Skin, like Freckles, were always a very bad Omen; but the worst of all was black and blue Marks, the Nails and Extremities of the Fingers being also * livid, or of a Lead-colour. — This last indeed is always a fatal Sign in acute Diseases, as it indicates a Stagnation of the Blood in the Extremities of the Arteries. — It is however a favourable Sign, when there is a vivid Colour in the Nails; and therefore it is a Physician's Business to inspect them nicely.

There came on, even from the first Seizure, a violent Oppression of the Præcordia, which, daily increasing, together with a stringent Pain in the Heart, (for this they always complained of) and a tremulous Respiration, and as it were an Hiccuping, (nay, often with a terrible Singultus, and the greatest Languor, frequently even to Fainting) portended the utmost Danger; besides all which, Tremors, Subculta of the Tendons, a Staggering in the Head, irre-

* *Essay on Fevers*, Page 98.

gular Shudderings, and cold Sweats, now suddenly came on. — The Feet were often extremely cold, at the same Time that the Face, and especially the Cheeks, were most violently burning; in the mean While a most profuse and foetid Sweat flowed down to the very Extremities of their Ankles, the Pulse all this Time exceedingly low, and as quick as possible, and now Death instantly ensued.

A most destructive Diarrhœa also frequently melted down the miserable Patients, the Skin being hard, and quite dried up, like an Hide, whilst the Tongue was as stiff as if smoak-dried, scarce any Power of Motion left, even so much as that of Speech. Not uncommonly also, at the Height of the Disease, black, ulcerous Aphthæ tormented them in their Fauces and Throat, which were very speedily after followed by a constant Singultus, then a sanious or gangrenous Dyfentery, which soon carried off the Sick. — However, a slight Flux coming on about the eleventh Day, whether owing to Art, or spontaneously, was salutary to several, provided it was not livid, or too liquid.

At this Time also (*viz.* at the State of the Disease) a plentiful Eruption of Pustules, in the Manner of the Small-pox, but containing nothing in them but a thin sharp * Ichor, was exceedingly beneficial. — Sometimes however

* *φλύκταινας* of the ancient Physicians.

those which broke out were much milder, and very angry, which went often again in the Form of Scales : These also were salutary. In some particular Patients I took Notice of some very white and broad Spots, a little prominent, like those from the Sting of a Nettle : These were of doubtful Presage.

There were several others of those sick Persons, who had indeed none of those Symptoms, but were relieved either by Ulcers in the Ears, or small Swellings, or by a Parotis ; all of whom were affected with a great Deafness, and that too of a long Continuance.

An Hæmorrhage from the Nostrils was also salutary to a great many ; altho' it was a very bad Sign, when only a few sharp Drops, tinged with Blood, distilled from thence ; nor indeed did a copious Discharge of that Kind always prove serviceable ; for the Nostrils frequently had too great a Discharge from them, even to Fainting, especially at the latter End of *July*, when it was often most exceedingly profuse ; at which Time most commonly a bloody Dysentery came on also.—I scarce remember any Fever, in which a Loss of Sight, and false Sparklings before the Eyes, were so common.

I knew of nothing that was so certain a Sign of Nature's getting the better of the Disease, as a very free and copious Spitting, a kindly Sweat coming on, or a plentiful Discharge of a tawny, thick

thick Urine : However the Urine very seldom deposited any Sediment during the whole Course of the Disease ; nay, when it had remained turbid for some Hours, it became bye-and-bye quite thin. This is always a Sign of a Fever terminating ill, and therefore, upon the slightest Occasion, this was attended with a Relapse. —If any one made use of a Flesh or Fish Diet, unless he had been very well purged, and his Recovery confirmed, he infallibly indulged himself herein at the utmost Danger of his Life ; nor did he often run a less Risk from a more rough Cathartic.

It is my Opinion, indeed, that the common People hurted themselves very considerably by eating too freely of Fish, of which, at this Time, there was an amazing Abundance ; especially Mackarel ; since these always produce viscid and rancid Humours. The Sweat indeed of the very healthiest Person, who feeds much upon Fish, is by far more foetid than if he lived only upon Flesh and Bread.—Nay, it has been a long While remarked, that eating too plentifully of Fish produces the Scurvy, and other cutaneous Disorders.—

So much as to the Nature of this Disorder : I am now also to mention a few Things relative to the Cure of it.

In the Cure of Diseases indeed some general Rules are to be observed, with that Proviso, however,

however, that proper Regard should be paid to the Constitution of every Patient: Therefore * *Celsus*, from *Hippocrates*, says, “ Mederi oportere & Communia, & propria intuentem.”

Nor indeed is there any Case whatever in which this is more requisite than in Bleeding, where both the Strength and Age, and also the Habit of Body, are to be diligently attended to.

In the very Beginning of these Fevers Bleeding is exceedingly proper, and that more, or less, in Proportion to the † Symptoms; as thus: If the Pulse is strong, the Fever violent, or the Pain acute, it ought to be repeated, especially if a very tenacious Film covers over the Cruor; but this is by no Means to be done, if the *Cra-sis* of the Blood is not sufficiently firm, and too attenuated; and more particularly so, if the Serum of it is blackish, or tinged with red. However there is no certain Indication to be drawn from the Colour and Superficies of the Cruor, unless it springs forth with a full Stream and Force; since, when it trickles down the Arm, or comes out Drop by Drop, it always deceives with a false and florid Appearance.

Blood being drawn in the first Place, it is necessary, bye-and-bye, to vomit the Patient with some gentle Emetic, especially if a Sickness, and

* *Cels.* Præfat. P. 17, Edit. Almeloveen.

† Consult what I have said in Regard to Bleeding, in putrid, malignant Fevers, *Essay on Fevers*, Page 104.

a Reaching to vomit, calls for it ; for, by the Use of this Method, the bilious Colluvies (which, if it remained, would for the future feed the Disease) is most effectually pumped up. — This also Nature herself points out, by her frequently, of her own Accord, exciting a Puking ;—and not only in the Beginning, but in any Stage of the Disease, the Stomach is to be washed out, if there is an Urging to vomit, or there is a bilious, fœtid, and very disagreeable † Erućtation.—The Yolk of a rotten Egg, altho' given in a very few Grains, immediately occasions a dreadful Cholera ;—stagnant and putrid Bile is no less virulent, and therefore for that Reason is to be thrown off as soon as possible.

In general, after the Emetic follows a Stool ; but, if this does not answer, Recourse is to be had to some gentle Clyster. Should this however prove ineffectual, and, before the Coming on of the Fever, the Patient should be more costive than he ought to be, he is to be made more laxative by proper Medicines, as by Manna, Crem. of Tartar, Rhubarb, *Glauber's* Salts, &c. which chiefly act in the Primæ Viæ, and at least occasion no violent Commotions in the Blood.—I by no Means approve of drastic

† Ubi Rućtus amari cum gravitate Præcordiorum sunt, ad Vomitum protinùs confugiendum est. *Cels.* Lib. 1, C. 3.

Cathartics, as being exceedingly prejudicial. The milder Purgatives very commodiously exterminate those Humours, which, by remaining longer in the Viscera, every Day acquire a greater Acrimony, and even which return again perpetually into the Blood thro' the *Mesaraic* Vessels and the lacteal Veins.—After the Vomit, and the Purgative, a small Quantity of *Theriaca Andromachi*, or Elixir Asthmaticum, is to be administered.

Having proceeded thus far, it will be now necessary to make a Pause for some little Time, in order to examine which Way Nature herself points, and not to * drive her out of her Course by a preposterous Farrago of Medicine. In the mean Time, however, some subacid Diluents are to be freely used, in order that a pure and uncorrupted Matter may be mixed with the Mass of Blood, and that its sharp Salts, and pernicious Acrimony, may hereby be corrected; for by this Method Things are most successfully brought to a Crisis, especially if some mild Attenuants, and laxative Medicines, are exhibited likewise. Nor can I easily per-

* — 'Ακμαζουσῶν τῶν Νέσων, 'Ησυχίαν ἔχειν βελτίον.

Hippocrat. Aph. 29, Sect. 2.

This is an Admonition of the greatest Moment in acute Disorders; for what prudent Physician, during the Paroxysm of an intermitting Fever, would disturb the Course of Nature?

ceive what other Kind of Physick is to be given in this Stage of the Fever, unless the Strength of Nature is exhausted, and the Circulation of the Blood grows torpid ; for then you must have Recourse indeed to proper Stimulants, by laying on Blisters, and also by administering some generous Alexipharmacs.—I intreat you however, good Doctor ! not to make too free with those ; since, in throwing in large Quantities of volatile alkaline Salts, every Thing tends to the greatest Degree of Putrefaction, unless you can moderate the Acrimony of the Humours, and prevent the Dissolution of the Blood.—For this Reason, in Cases where warmer Medicines are required, I generally intermix some Acids, as Vinegar, Juice of Lemons, or Elix. Vitriol. which, being properly saturated with Spices, makes no contemptible Alexipharmac, and of which some Drops are very frequently to be given out of an aromatic Wine, or some Cardiac Julep, with a Bolus composed of *Confect. Cardiac.* Saffron, *Rad. Contrayerb.* &c.—It is needless however to lay down any Forms of Prescription ; since whoever knows what is indicated in the present Case, can very easily adapt his * Remedies to it : Indeed Care is to be taken, not to use the Spurs when there is Occasion for the Reins ; nor should we be too eager in for-

* Εἰ τίς ἐθελε τὴν Αἰτίαν τοῦ Νοσήματος, ὅς ἐστι προσφεῖν τὰ
 ζυμώματα, Hippoc. de Flatib. in the Beginning.

cing Sweats by administering very warm Medicines. For, if the Blood is but well diluted, and the proper Temperament of it preserved, Nature herself will in her own Time, and of her own Accord, bring forth a * Sweat.—I shall not deny, indeed, that this Fever is very seldom removed without Sweating, but, when it is very profuse, I always suspect it.

In the Cure therefore of Diseases of this Kind, I commonly use this Method:—In the Beginning of the Fever, after the proper Evacuations, I order the saline Draughts, with some fixed or volatile alkaline Salt (according as Circumstances require; the one to promote Urine, by the other a Sweat) with Juice of Lemons, or *Seville* Oranges, or very sharp white-wine Vinegar, well saturated, to which I add simple Alexeter. Water, Sp. Lavend. C. or some such Thing. In this Manner is compounded a Medicine, which, like a mild Soap, attenuates the thick Humours, and intimately commixes the Oils and Salts with the watery Part of the Blood.—In the mean Time subacid Diluents are to be plentifully administered, which, by the Mediation of this saline Remedy, are very readily intermixed with the whole Mass of Humours. By this Method the Blood is kept well mixed, and duly fluid, and its Acrimony is corrected;

* Πάϊη δὲ ἀνοιγόμενον τε καὶ ἀναπνέον, καὶ κινούμενον τὸ Σῶμα συμφέρον ποιήσει. *Hippocrat. de Locis in Homin. Sect. 939.*

whilst the sharp Salts, being dissolved, flow off continually through the Pores of the Skin, by Stool, or Urine; nor is Nature in the mean Time disturbed in performing her Concoctions. However, should she prove tardy, and too languid, I recruit her Imbecillity by a more generous Course of Medicine; and that more especially, if a coldish Sweat should come on, the Urine be pale, or the Eruptions (whether they are Pustules or Petechiæ) not be of so lively a Colour.

By this Management it generally happens, that kindly Sweats break forth, which daily alleviate the Fever; nevertheless, if they are unequal and irregular, either too cold or too profuse, Things turn out not so well; for often there comes on immediately a Rigor, and an Exacerbation of the Fever, and, in a very short Time after, a Phrensy; upon the Approach of which, if the Bowels are too costive, a Clyster is forthwith to be administered (indeed I would always rather chuse through the whole Course of the Disease to keep my Patient in a laxative State, than a costive.) If a Delirium renders it necessary, Recourse is immediately to be had to the Application of Cupping, and Scarifications on the Neck and Shoulders; after which, Blisters are to be applied behind the Ears, to the Occiput, and to the very Places which have been scarified, and next to the Legs and Thighs.

—Those Things are most serviceable, where the Powers of Nature are torpid, and the Pulse in the Arteries languid.—At this Time, however, I add to the Cardiac Bolusses Camphor. or Sal Succin. interposing sometimes also an Ounce or two of Diacodium, nay, if the Restlessness requires it, one or two Grains of Extract. Thebaic.

In this Course of Medicine I persist, to the State of the Disease, when every Thing very quickly takes a much more favourable, or a much worse Turn ; nor are Days now only to be carefully attended to, but even Hours : If neither a kindly Sweat relieve the Patient, nor a gentle Diarrhœa nor a free Expectoration come on, the Patient is in very great Danger.—At this Time then we must try what Effects a mild Purgative may produce, by giving some Rhubarb, Manna, Crem. of Tartar, *Glauber's* Salts, &c. you are also in the mean Time to support the decayed Force of Nature by proper Cardiacs : Indeed I scarcely know any better than some generous red Wine, with Spices boiled in it, such as Cinnamon, Mace, Nutmeg, *Seville-Orange* Rind with Half Water, or some austere Alexipharmacs with Elix. Vitrioli or Lemon-Juice ; for these strengthen the Force of the Fibres, and the Crasis of the Blood, and at the same Time they greatly restrain the Putrefaction of the Humours. A Thing this, which is diligently to be attended to, where otherwise

wife the Blood degenerates into a Sanies, and the Lymph into an Ichor, and in a short Time there steals on a putrid Dissolution of the Whole, as if the * Poison of Vipers had been mixed with the Blood.

A Swelling of the Hypochondria, a Rumbling in the Intestines, a tense Abdomen, a Costiveness, Head-ach, a too great Drowsiness, a Vertigo, an approaching Delirium, a very stinking Breath, and an Oppression of the Præcordia, with frequent Belchings, demand the Cleansing of the Bowels by Purgatives.—Easy, constant, and regular Sweats, the Eruption of Pustules, or Exanthemata, or a plentiful Spitting coming on, forbid it; for a Diarrhœa, even in Peripneumonies, intirely suppresses the Spitting; which frequently unfortunately happens also in the Small-pox.—A great Deficiency of Strength, and a Languor, also does not render Purging so proper.

However, under the Circumstances above-mentioned, I at all Times give a † Purgative, especially in the Decline of the Fever, when Nature aims at a Crisis no other Way. This Method of Purging is often tried with very great Success even in the confluent Kind of Small-pox, upon the ninth or eleventh Day from the Eruption, when moreover very little can be

* See the *Essay on Fevers*, Page 51.

† Ibid. Page 111—114.

carried off by the salival Ducts, or the Pores of the Skin; and why not in this Fever also?—Without Doubt, where a putrid Colluvies, and a corrupted Bile, abound in the Ventricle, and the Intestines, they ought to be carried off as soon as possible; unless you would cherish the Disease by increasing the * Putrescence every Hour.—In this Fever indeed, of which I have now treated, I have seen an immense Quantity of bilious Saburra brought off by Vomit or Stool, to the great Relief of the Sick, it being productive of a sweet Sleep, when there had been before the greatest Restlessness, and a perpetual Watchfulness, for several Days, and also Nights.—Whilst indeed the Ventricle is loaded with this acrid Filth, and putrid Bile, the Head always greatly labours, the Spirits are disturbed, and the Strength greatly impaired.—Nor is it only in the Primæ Viæ that Vomits prove so very beneficial; but they do so likewise through the whole System of the Vessels, by attenuating the stagnant Humours, and expelling those which are † putrid.

* See the *Essay on Fevers*, Page 111—114.

† See Dr. Cheyne's *New Theory of Fevers*, Page 83—94, Edit. of the Year 1722.

J U L Y.

New Moon the 12th. Full Moon the 27th.

This Month likewise was somewhat cold, but the Atmosphere exceeding dry, and as it were smoaky: The Wind was often south-west, oftener north-west, and sometimes easterly. Every Spring and Rivulet was almost intirely dried up, and scarcely a green Herb to be seen.

Rain 4. 7. 9. $\frac{1}{10}$. $\frac{1}{12}$. 16. 19. 20. 26. 30.
Dig. Dec.
= 0.608.

Thunder the 30th.—A very heavy Rain in the northern Parts the 28th.

Greatest Height of	8	15, 29.9, N. N. W. 1.	} Mean Height
Least	————	26, 29.3, S. S. W. 3.	
			29.6. $\frac{1}{31}$.
Coldest Day	22, 39, N. N. W. 1.	} Mean Height	31 $\frac{3}{31}$.
Warmest	3, 26, S. W. b W. 2x.		

The Small-pox were now epidemic, but yet generally mild; a Rash up and down, and Disorders of the Lungs; towards the End of the Month Dysenteries were common.

The pestilential Fever now raged very violently, and destroyed great Numbers: The common Burials were increased to at least six Times the Number; nor did this Disorder prevail only here, but also through the whole Neighbourhood. — A dreadful Anxiety, a perpetual Restlessness, and a most terrible Pain of the

I head, tormented the Sick, and presently came on a most outrageous Madness, and frequently, in a very short Time after, a Lethargy, or a Convulsion of the Nerves. There were Discharges by Stool, Urine, and Tears, without the Patients perceiving it; the Voice oftentimes was suppressed in the Fauces, the Tongue frequently black, and exceeding dry, muttering incoherent, wild Sentences. — Several at the Close of the Disease had a very painful Ulceration of the Fauces, altho' in the Beginning it was only a slight Inflammation: This occasioned a very great Difficulty in Swallowing, and rendered it very tormenting. Imposthumes of the Ears, Buboës, and very painful Boils, commonly broke out between the ninth and fourteenth Day of the Disease: These were generally salutary, especially if they came to a favourable Suppuration; but, if they struck in, it was very bad: Indeed, sometimes they remained indurated several Days, without the very least Suppuration, especially in the Parts about the Neck, where they continued even for some Months. About this Time also there frequently came on a Diarrhœa, which was beneficial, and that more especially, if that which was voided was bilious, blackish, but not too liquid: But a sanious, bloody, or a very watery Stool, was always an evil Omen. — The Stench of this was generally so great, as to be altogether

altogether intolerable to the old Nurses, who attended the Sick, and even to the Sick themselves : Sometimes the Patients laboured under a fatal Tenesmus.

The Urine, even of those Persons who were upon their Recovery, continued crude, and often limpid ; often also it was turbid, wheyish, and as it were oily, and yet it never threw down any Sediment at all ; an evident Argument this of a very great Crudity, and that so far, that, altho' the Sick seemed to be quite restored, they nevertheless very frequently, upon the slightest Accident, † relapsed again. Indeed those, who were upon the Recovery, that fed too plentifully upon Flesh or Fish, infallibly fell back again into a Fever, especially if the Body had not been well cleansed by Purgatives. —Nevertheless, the stronger Kind of Cathartics exposed those Persons to the very same Danger.

Such Persons as had Abscesses break out in the auricular Passage, or behind the Ears, or in the Neck ; but more especially if several red, angry Pustules broke out about the Lips ; might almost certainly hope for a Recovery. All those who were sick, laboured under a Deafness, or Tinkling in the Ears, which fre-

† Febris, quæ sine ratione, sine bonis Signis, finita est, ferè revertitur. *Cels.* Lib. 2, C. 7. *Hippocrat.* Aph. 12, Sect. 2.

quently remained a long Time after the Breaking of the Imposthume.

Indeed it is surprizing, that the Eruption of so small a Quantity of morbid Matter should produce such happy Effects, as we very frequently perceive it to do ; since the Cause of the Disorder seems scarcely possible to be eradicated this Way. I imagine indeed, that this is only a Sign, that the Powers of Nature are as yet strong, and that the Circulation of the Blood is yet sufficiently free in the farthest and smallest Ramifications of the Arteries ; which being deficient, neither does an Imposthume, or Tubercle, come to a State of Maturation, nor do the Pustules emerge. Hence accordingly, a short Time before Death, Nature being quite overcome, the small Ulcers are perceived to be quite pale and dried up, and, if there are any Pustules likewise, they grow pale and livid, *viz.* from the Stagnation of the Blood in the Extremities of the smaller Vessels.

Amongst the other salutary Omens is moreover to be reckoned a sour, salt Taste in the Mouth, with a large Flux of Spittle ; on the contrary, a very bitter, and (as it is called) a Copper Taste, was a certain Token of the Disorder's terminating ill, and of a speedy Relapse into a Fever, unless the putrid Bile, and morbid Colluvies, were soon carried off by an Emetic,

tic, or a gentle Cathartic. After the giving of these, I daily experienced the beneficial Effects of * *Tinct. Corticis Alexipharm.* in recovering the Strength, and expelling the Remains of the Fever. The Virtue of this Medicine consists in strengthening the Fibres, and restoring a due Constitution of the Fluids, at the same Time that it does not obstruct the Discharge of the morbid Matter thro' the Pores of the Skin; and therefore it is safer to give this than the Cortex Peruvian. itself, which frequently constricts too violently.

During the Whole of this very unhealthy Season, the Blisters discharged commonly an immense Quantity of Humours, but healed with the utmost Difficulty; nay some were quite melted down by their enormous Flux.

There was for a long Time every-where an immense Quantity of Fish, especially Mackerel, by the immoderate Use of which, no Doubt, several Disorders were generated; for these increased both the Putrescence of the Humours, and that scorbutic Contagion which now raged every-where, chiefly amongst the Sailors; whose Gums were quite corroded, and whose Breath was exceedingly fœtid. — Upon this Account the Using a good deal of Vinegar is very proper, in order hereby to correct that rancid Oil that is in them, and that pu-

* *Essay on Fevers*, Page 122.

trescent Quality. — I have not the least Doubt, but that the plentiful Use of Vinegar, and Cyder, would be very beneficial to Sailors in long Voyages*; nay, this is already sufficiently experienced; so that several Captains of Ships carry Cyder with them even to the *East-Indies*: Vinegar indeed prevents the Putrescence of the Flesh, and Water likewise.

A U G U S T.

New Moon the 11th. Full Moon the 25th.

There was now the greatest Alteration, both in the Atmosphere itself, and the Constitution of the Air. We had now almost perpetual Showers, and the great Humidity of the Air dissolved every Thing: This occasioned a very bad Harvest, spoiled almost all the Corn, and rendered the Fruits of the Earth quite insipid. — There were every-where vast Quantities of Mushrooms. The Wind was very often southerly; a tempestuous south-westerly Wind also was common; which occasioned a very thick, cold, and exceeding moist Atmosphere, especially towards the End of the Month.

* Consult my *Method for preserving the Health of Seamen in long Cruises and Voyages*.

Rain $\frac{''}{2.}$ 3 4. $\frac{'}{5.}$ 6. 10—12. 15. $\frac{'}{16.}$ $\frac{'}{17.}$
 18. $\frac{''}{20.}$ 21. 22. 24. 25. $\frac{''''}{26.}$ $\frac{'}{27.}$ $\frac{'}{28.}$ $\frac{''''}{31.}$

Dig. Dec.

= 3.510.

A Storm the 26th, a. m. S. S. W. 4_x.—The 28th, a. m. S. W. 4. — A great Hoar-Frost the 29th.

Greatest Height of ☿ 30, 29.9, S. E. 1. } Mean Height
 Least ——— 3, 29.1, S. W. 2. } 29.4 $\frac{2}{3}$.

Coldest Day 29, 42, N. 1. } Mean Height 34 $\frac{2}{3}$.
 Warmest 1, 27, N. W. 1. }

The epidemical Small-pox, which in this Place were far from being fatal, were in other Places quite the contrary.—A bloody Dysentery, and Cholera, were common.—Several were troubled with a slight Angina, and a Swelling of the Fauces, together with wandering rheumatic Pains.

The malignant Fever, amongst the Sailors, was still rife, and destroyed several ; some indeed on the seventh Day, nay, sometimes sooner ; some indeed lingered on to the twentieth Day, and even beyond it.—At this Time frequently no Petechiæ appeared, or at least very few ; nevertheless they often spotted the Body all over. — Frequently oily and foetid Sweats melted down the Sick ; nor was it uncommon for a violent Dysentery to consume those whom the Fever had almost left : The Principles of
 the

the Blood being so exceedingly dissolved, that the Humours issued through whatever Passage they found.

SEPTEMBER.

New Moon the 10th. Full Moon the 24th.

A westerly Wind, generally inclining to the South, continued until the 18th, with an almost perpetual Fall of heavy Rain. Afterwards it blew in a quite contrary Direction, which raised the Barometer, and dried the Atmosphere.

Rain 1. $\frac{1}{4}$ 2. $\frac{1}{2}$ 3. $\frac{1}{4}$ 5. $\frac{1}{6}$ 6. $\frac{1}{7}$ 7. $\frac{1}{9}$ 9. $\frac{1}{4}$ 10. $\frac{1}{9}$ 11. 13. $\frac{1}{5}$.
 16. 17. 22. 23. 24. = 3.628.
 Dig. Dec.

A slight Storm the 7th, p. m. S. W. b W. 4x.
 —The 27th at Night, E. b S. 4x.—A Paraselene the 17th, H. 7, p. m. W. N. W. 1.

Greatest Height of ☿ 25, 30.0, N. E. 1. } Mean Height
 Least ————— 11, 29.0, W. 3. } 29.6 $\frac{2}{8}$.

Coldest Day 30, 59, N. E. 1. } Mean Height 41 $\frac{1}{2}$.
 Warmest 6, 34, S. W. 2x. }

Malignant Fevers now were neither so numerous or so violent. Several Persons were plagued with a Dysentery, and not a few with a violent asthmatic Cough. Swellings of the Fauces, the Parotids, the Cheeks, with a violent Tooth-ach, troubled Numbers. The Colic, arising from drinking too freely of new-made

made Cyder, with a violent Flux, was troublesome to a great many. Ophthalmies up and down, the Small-pox very rife.

O C T O B E R.

New Moon the 9th. Full Moon the 23d.

This Month was uncommonly cold; it began with a Frost, and on the 10th it was very severe. The Wind was generally north-easterly, not seldom easterly, and sometimes we had a rainy, southerly Wind: The Station of the Barometer was generally high, but the Atmosphere dense.

Rain $\frac{''}{4}$. $\frac{'}{5}$. 6—8. 16. 17. $\frac{''}{19}$. $\frac{'}{20}$. 21. $\frac{'}{23}$

$\frac{'}{24}$. 28. 29. — Hail the 7th. — Much Hail

Dig. Dec.

and Snow the 23d. = 1.914.

Greatest Height of ☽	27, 30.3, N. E. 1.	} Mean Height
Least	20, 29.3, S. W. 2x.	

29.8 $\frac{22}{8}$.

Coldest Day	27, 69.	} Mean Height 56 $\frac{12}{8}$.
Warmest	20, 44.	

Slow, nervous Fevers were common; there were also some malignant ones still remaining, which towards the End were attended with a Diarrhœa, and, sometimes, a mucous Dysentery, with Streaks of Blood. A Cough, Angina, Swelling of the Fauces, and Pains in the Teeth, seized Numbers. The Cyder-Colic

now prevailed very much, however, not with its usual Violence, on the Account of the Diarrhoea, which almost constantly attended it. The Small-pox were yet epidemical.

N O V E M B E R.

New Moon the 8th. Full Moon the 22d.

November also was very cold, and the Atmosphere very dense; the Wind often north-easterly, often north-westerly, a very violent and rainy south-west Wind frequently intervening. Now and then there were very great Hoar-Frosts, nor was it uncommon to have a severe Frost.

Rain ^{///} 1. [/] 2. 5. 7. [/] 9. 10. 11. 13. 14. ^{''} 16. 20.
^{''} 21. 22. 23. ^{///} 25. [/] 27. 28 — 30. — Hail 1. 5.
 25. — Much Snow [/] 2. 24. 25. = 3.844. Dig. Dec.

A very violent Storm the 1st, from the Morning very early until Night, N. W. 4x.
 — The 21st, in the Morning, S. W. b W. 4.
 — The 26th, at Night, S. W. 4x. — Thunder and Lightning the 25th in the Evening.

Greatest Height of	8 18, 30 2, N. N. W. 1.	}	Mean Height.
Least	24, 28.8, E. 2.		
			29.5 $\frac{1}{2}$.
Coldest Day	25, 69. N. N. E. 1.	}	Mean Height 60 $\frac{2}{5}$.
Warmest	15, 50, S. W. b W. 1x.		

The Small-pox were still rife; malignant Fevers up and down; slow and miliary ones here

here and there, chiefly in the Country : Erysipelas, Angina, and vexatious Coughs, seized several : Numbers laboured under the Cyder-Colic, generally attended with a Diarrhœa, by Means of which it was soon removed; for a colical Disorder very seldom torments those Persons that are laxative; at least this Disease soon gives Way to Anodynes; which may be conveniently given after one or two Doses of Rhubarb; and, amongst these, none is better than Philonium: Take Care, however, that you do not render your Patient too soon costive; since, very soon afterwards, the Pains return again, by the Heaping up together afresh the acrid Colluvies: The Bowels therefore are always to be kept open for some Days, whilst the Body in the mean Time is to be well guarded against the Cold, otherwise, by shutting up the Pores of the Skin, the
* Bowels soon suffer.

D E C E M B E R.

New Moon the 7th. Full Moon the 21st.

A melancholy, stormy, and rainy Season ushered in the Month of *December*, at the same

* *Alexand. Trallianus* well knew the Connection between the Pores of the Skin and the Intestines: “ αὐξεται γὰρ τὸ ἐνὶ ὕμνῳ, (viz. to the Intestines) εἰς ἕσπον ἀνὰ πύκνωσιν τὸ Δέρμα.” *Trullian. P. 216, ex Edit. Goupyli, Fol. Lutet. 1548, and also Hippocrat. Lib. 6, Epid. Sect. 3, in the very Beginning.*

Time

Time that the Wind was every Day south-westerly. On the 2d and 3d of the Month there was terrible Thunder and Lightning, with Hail and Rain; this rendered the Atmosphere very dense, and exceeding moist. From the 11th to the 20th the Face of Things was quite changed, by the Setting-in of a very severe Frost. Immense Hoar-Frosts, with a clear Sky and north-east Wind: From that Time a southerly Wind prevailed, which rendered the Atmosphere very dense and moist.

Rain	$\frac{''''}{1}$	$\frac{'}{2}$	$\frac{''}{3}$	$\frac{''}{4}$	$\frac{''}{5}$	$\frac{''}{6}$	$\frac{''''}{7}$	$\frac{''}{8}$	$\frac{''}{9}$	10.	19.
	$\frac{''''}{21}$	$\frac{''}{22}$	$\frac{''''}{23}$	$\frac{'}{26}$	$\frac{'}{27}$	$\frac{'}{29}$	30.	31.	— Violent		
Hail	2.	—		Snow	$\frac{'}{14}$	$\frac{'}{15}$	$\frac{'}{19}$	20.	Dig. Dec. = 6.290.		

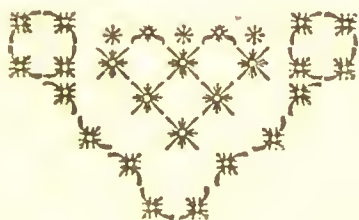
A furious Tempest the 1st, at Night, S.W. 4^x. — The 2d, p. m. S. W. b W. 4. — A Storm the 3d, S. W. 4^x. — The 5th, W. 4^x. in the Evening. — The 6th, early in the Morning, W. S. W. 4. — The 20th, before Day-break, N. W. b N. 4. — The 21st, all Day, S. S. E. 4. with a most heavy Rain, which intirely melted all the Snow; the same Day also there was very terrible Thunder and Lightning. — A very stinking Fog the 27th, W. S. W. 1^x.

Great st Height of	8	31, 30.0, N. W. 1 ^x .	} Mean Height
Least	—	22, 23.3, S. S. W. 3 ^x .	
			29.4
Coldest Day	19, 80,	E. N. E. 1.	} Mean Height 61 $\frac{2}{3}$.
Warmest	8, 49,	S. W. 3.	

The

The Small-pox were still rife : Pleurifies, Peripneumonies, and Rheumatisms here and there : Some petechial Fevers still ; a violent Cough, and terrible Asthma, afflicted Numbers : The Colic was exceeding common ; nevertheless a Looseness, and that very bilious, soon carried it off.

The whole Quantity of Rain, for the Year
Dig. Dec.
1740, was = 24.042.





OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1741.

JANUARY.

New Moon the 6th. Full Moon the 20th.

 R O M the Beginning of the Month to the 6th the Wind was north-west, from thence to the 15th we had a very cold north-east Wind, then came on a rainy south-west; but, from the 26th to the very End, it blew furiously from the South-east. — About the Middle of the Month there was an exceeding hard Frost, and a very dry Atmosphere; but, whilst the Wind was south-westerly, it became very moist, and all the Frost intirely melted away.

Rain

Rain 2. $\frac{1}{16}$. $\frac{1}{18}$. $\frac{1}{19}$. $\frac{1}{21}$. $\frac{1}{22}$. 24. 25. $\frac{1}{27}$. $\frac{1}{28}$.

Dig. Dec.

29. — Snow 10. 12. 14. = 1.936.

A Storm the 27th, in the Night, and all the succeeding Day, S. E. b E. 4.

Greatest Height of	8	1, 30.3, N. W. 1.	} Mean Height
Least	16, 28.9, S. S. W. 3.	29.8.	

Coldest Day	15, 79, E. N. E. 1 ^x .	} Mean Height 61 $\frac{2}{3}$.
Warmest	22, 52, S. W. 3 ^x .	

The Small-pox were as yet very common. Numbers laboured under the Colic, occasioned by the Drinking of new Cyder, and not a few from a Superabundance of Bile : All of them were open, and laxative, at one Time discharging bilious, at another mucous Matter. Several acute Disorders of the Breast, and also Anginas and Rheumatisms, were common. Apoplexies and Epilepsies here and there.

Such Persons as were consumptive in their Lungs suffered greatly, by considerably increasing their Cough and the Difficulty of Breathing.

The petechial Fever was somewhat more rife.

The common People now were affected with a very nasty and rank Itch ; the Matter which ought to be discharged by Perspiration being pent in, from the long and severe Cold's obstructing the Pores of the Skin, by which Means the *miliary* Glands were shut up, and at length corroded. — In cold Countries, and

Seasons, they are always much troubled with a scorbutic Plague, arising from a too great Contraction of the Pores of the Skin, and a too great Retention of the saline Effluvia of the Body.—Is it not easy from hence both to discover the Method for its Prevention, as well as Cure? It is certainly much more easily cured in Summer, than it is during a severe Winter.

F E B R U A R Y.

New Moon the 4th. Full Moon the 19th.

The Mercury in general stood high in the Barometer this Month, and that even in the Beginning of it, altho' the Wind was sometimes south-easterly, nay, quite southerly; but the Constitution of the Air was even then very moist and heavy*; nevertheless, from the 18th home to the End, a north-easterly Wind made the Atmosphere thinner, very cold, and much drier.

Rain 1. 5 — 7. 10. 14. 15. 16. 17. 18. 19.
 Dig. Dec.
 26. — Much Hail 15. 16. 17. = 1.456.

The Barometer stood at 30.5 on the * 7th, altho' the Wind was S.S.E. 2^x. At this Time there was a very great Mist.—A Storm the 16th in the Morning, S. 4^x. — Thunder and Lightning in the Evening.—A very great Halo

* See Vol. I, Page 181.

about the Moon the 11th, H. 9, p. m.
S. W. b W. 1.

Greatest Height of	8	27, 30.6, E. N. E. 1.	} Mean Height
Least	16, 29.2, S. b W. 3 ^x .	29.9 $\frac{5}{8}$.	

Coldest Day	24, 72, E. N. E. 1.	} Mean Height 59 $\frac{9}{8}$.
Warmest	6, 53, a Calm.	

There were many Small-pox still : Rheumatisms, Peripneumonies, and Pleurifies, both of the true and bastard Kind, here and there. Violent Coughs, and terrible Paroxysms of the Asthma, were common ; hence it was that this Season was very injurious to consumptive Persons, since the north-easterly Wind irritated the Cough, streightened the Lungs, and checked the Spitting. The Colic, and Diarrhœa, or the Gripes, prevailed very much.

The malignant Fever still continued, but chiefly amongst the Sailors, and mostly in the Hospitals,

M A R C H.

New Moon the 6th. Full Moon the 21st.

The Mercury stood high during the whole Month of *March*, the Wind in the mean Time constantly between the east and north Points. The Air also was very dry and cold, a Frost very common, nay, towards the End of the Month, there was a very severe one,—There was not so much as one Drop of Rain all this

Month.—Snow 18. 19.—Hail 28. = 0.072.

Dig. Dec.

The long-continued north-easterly Winds very considerably lessened the Tides, and the * high Station of the Barometer did not a little contribute thereto. This indeed is a constant Observation, that very great Roarings of the Waves and very high Tides precede, nay portend, the Approach of a tempestuous Season, at least upon these Coasts: On the contrary, during open, fair Weather, and a north-easterly Wind, the Flowings of the Sea, and the Tides, are very small.

A. B. the 5th, H. 9, N. N. E. 1.—A small one the 9th, H. 8, E. 1^x.—The 21st, in the Evening, E. N. E. 2.

Greatest Height of	8	7, 30.5, N. E. 1.	} Mean Height
Least	31, 29.6, N. 1.	30.0 $\frac{2}{3}$.	
Coldest Day	30, 68, E. N. E. 2.	} Mean Height 56 $\frac{1}{3}$.	
Warmest	9, 50, E. b S. 1 ^x .		

The Small-pox were every-where epidemic in general, however somewhat milder, unless amongst the Sailors, several of whom died in it, the malignant Fever, which still continued, probably contributing thereto: I believe also, that the scorbutic Habit, with which this Sort of People are affected very much, renders the Small-pox more fatal; since it was not uncommon to discharge bloody Urine, and sometimes for them to expectorate bloody Matter.

Several Pleurisies and Peripneumonies, and

* See Vol. I, Page 17.

those very violent. — The Rheumatism and Gout were exceeding rife, nor was a terrible * Angina uncommon. — A very troublesome Asthma, for a long Time, and in a grievous Manner, oppressed Numbers. — Several also laboured under a very tedious and troublesome Cough. The Blood drawn from all those Persons was very glutinous. Not a few consumptive Persons were suddenly taken off.

A P R I L.

New Moon the 4th. Full Moon the 19th.

The Constitution of the Atmosphere still continued very dry and cold: In the Beginning of the Month there was Ice, and very great Hoar-Frosts. The prevailing Wind this Month was the north-east, but, at the Close of it, it was easterly, the Atmosphere in the mean Time being very rare and dry; about the Middle there fell exceeding great Dews. — At the End of the Month, about *Totness, Dartmouth, Kingsbridge, &c.* they had a very great Quantity of Rain, whilst there was not so much as a single Drop here.

Rain 1. 5. 8. $\frac{1}{9}$. $\frac{1}{10}$. 20. 21. = 0.452. Dig. Dec.

* Ὅταν χειμέριον γένηται Ἡρ, καὶ ὀπισθεὶ χειμῶν, χειμεῖναι, καὶ αἱ νοῦσαι, καὶ βηχιδέες, καὶ περιπνευμονικαί, καὶ κυταγγικαί.
Hippocrat. de Humorib. Sect. 7.

Greatest Height of ☿	3, 30.4, N. 1.	} Mean Height
Least	1, 29.5, N. 1 ^x .	
Coldest Day	2, 64, N. 1.	} Mean Height 47 $\frac{1}{2}$.
Warmest	14, 41, a Calm.	

The Small-pox were every-where epidemic : Pleuro-peripneumonies very common : The Asthma, a violent Cough, and indeed both acute and chronical Diseases of the Lungs, prevailed exceeding much ; several were seized with a Spitting of Blood ; and Numbers of consumptive Persons joined the Mansions of the Dead.

A great many putrid Fevers, often attended with miliary Eruptions, and frequently with Petechiæ, in the southern Parts of *Devonshire*. — Upon a diligent Inquiry, I found that these were generally the Offspring of the Fever which raged among the Sailors, one or other of those Persons frequenting those Places after their Recovery : So dangerous is it to receive People recovered from contagious Fevers ; for the very Seeds of the Disease adhere for a long Time to the very Cloaths.

M A Y.

New Moon the 4th. Full Moon the 19th.

Both in the Beginning and the End of *May* the Constitution of the Air was very dry, but about the Middle it was dense and somewhat moister, frequent Showers falling between the

4th and 21st, but afterwards scarcely a Drop of Rain. The Wind was frequently south-easterly, altho' in the Beginning it was north-easterly, and at the Conclusion north-westerly. Now and then there were very great Dews, especially after the 20th.

The Gardens were infested with innumerable Caterpillars.

Rain 5. $\frac{1}{6}$. 7. $\frac{1}{8}$. 10. 13. 15. 17. $\frac{1}{18}$. 19.

Dig. Dec.
= 0.928

A small Storm the 19th in the Morning, S. S. E. 4x.—Very heavy Showers on the 30th, in the northern Parts, none here.

Greatest Height of ☿ 21, 30.1, E. b S. 1. } Mean Height
Least ——— 18, 29.1, S. W. b W. 2x. } 29.6 $\frac{2}{3}$.

Coldest Day 14, 52, N. b E. 1x. } Mean Height 37 $\frac{2}{3}$.
Warmest 27, 24, N. N. W. 1. }

I scarce ever remember the Small-pox to have been every-where more rife. A Rash here and there, or the *Rossalia* of *Frid. Hoffman*. —The Angina, Cough, and Asthma common. Some † tertian Fevers, some slow and nervous, more petechial, but the Spots were now much more florid.

† Consult what I have said in the *Essay on Fevers*, Pages 20, 21.

JUNE.

J U N E.

New Moon the 2d. Full Moon the 17th.

The Wind was this Month various, but for the Generality westerly. The Atmosphere was commonly thick, and a very hot Season towards the End.—An immense Number of all Kinds of Caterpillars devoured all the different Kinds of Garden-stuff. Grasshoppers innumerable, and vast Swarms of Flies, and Horse-Flies, which greatly tormented the Cattle.

Rain $\frac{1}{2}$. 3. 6. 7. $\frac{1}{8}$. 9 16 — 18. $\frac{1}{9}$. 20.
 $\frac{1}{21}$. $\frac{1}{24}$. $\frac{1}{26}$. 27. = 1.250. Dig. Dec.

An unusual Light the 29th, H. 11, p. m. namely, a fiery Arch, which was very lucid, and extended from the Horizon south-easterly to at least 90 Degrees.

Greatest Height of ☿ 13, 30.0, N. W. 1. } Mean Height
 Least ————— 8, 29.3, W. S. W. 2. } 29.6 $\frac{1}{2}$ $\frac{5}{8}$.

Coldest Day 10, 34, W. b N. 1^x. } Mean Height 27 $\frac{2}{2}$ $\frac{2}{8}$.
 Warmest 29, 18, S. E. 1. }

The Small-pox were very epidemical, far and near, and carried off several; however in this Place they were not so fatal, unless accompanied with *Petechiæ*. A † cool Air, and the plentiful Use of acidulated Liquors, were at

† See what I have said in the *Essay on Fevers*, Chapter of the *Small-pox*, Page 162.

this

this Time highly necessary, as without them the Patients were liable to be suffocated : For now the Stench of those Persons in the confluent Kind of Small-pox was exceedingly offensive ; this, however was not to be looked upon as a bad Omen, provided other Symptoms were favourable. A slight scarlet or pustulary Fever here and there : Anginas, and Swellings of the Fauces, common : The Sailors' Fever up and down.

J U L Y.

New Moon the 1st. Full Moon the 17th.

New Moon the 31st.

The exceeding scorching and dry Season now burned up every Thing ; you could scarcely discover even a green Herb, unless in the most swampy Meadows ; nevertheless there was an early and very plentiful Harvest, and the Corn was excellent.—In the Beginning of the Month the Wind was easterly, from the 7th to the 20th north-easterly, and from thence to the End unsettled. Great Dews almost every Night. The chirping Grasshoppers were innumerable : Flies and Horse-Flies tormented the Cattle exceedingly.

Altho' the Atmosphere was very dry, as was evident from the Hygroscope, it nevertheless appeared as if covered over with a thin Smoak,
which

which frequently happens in very * dry and sunshiny Seasons.

Rain 5. 6. $\frac{1}{16}$. $\frac{1}{18}$. $\frac{1}{20}$. 25. 28. 29. = 0.764. Dig. Dec.

Lightning the 3d at Night, E. S. E. 3. Thunder likewise at a Distance.—A very great and lucid northern Light (altho' the Moon shone) the 12th, almost all Night, N. 1.

Greatest Height of ☉ 9, 29.9, N. N. E. 1^x. } Mean Height
Least ————— 5, 29.3, E. S. E. 2^x. } 29.5 $\frac{8}{27}$.

Coldest Day 20, 30, N. 1. }
Warmest 14, 14, N. 1^x. } Mean Height 22 $\frac{4}{27}$.

Very hot Days 1. 7. 9. 10. 11. 13. 14. 15. 24. 28.

The Small-pox every-where. Several putrid Fevers, with a great Oppression of the Præcordia, dry Tongue, and very bilious Urine. The Cholera and Diarrhœa very common: Leek-coloured, black Matter was frequently discharged; the Pains in general were very violent; and a good deal of blackish Bile was brought off. Every one being almost dissolved by the profuse Sweats arising from the excessive Heat, was very greatly debilitated.

Not only the more humid Parts of the Blood were evaporated by the intense Heat, but the more active likewise, and the Strength of the Fibres was moreover greatly enervated: What was the Consequence? The denser and more

* See the Observations for the Month of June, 1740.

sluggish Mass of the Humours still remained behind, by which Means the Circulation of the Blood in the *mesaraic* Vessels, the Liver, Spleen, and every-where else, became much slower according to the Laws of Nature, and this occasioned an easy and a too speedy Obstruction. When once however this excessive Heat itself had daily torried and sharpened the Salts, the Acrimony of the Humours became daily greater; and this rendered the Bile more acrid; which occasioned the Cholera, violent Gripings, and putrid Fevers.—What then is to be done? The Blood must be plentifully diluted, and its Acrimony also is to be continually softened down. “I
“ will do it certainly, but the more that is
“ drank, the more profuse the Sweat.” Behold then a Cure for this Evil, without the Fatigue of Medicine! Mix only a little generous red Wine with some diluting Liquors, and, being taught by Experiment, you will be surprised at such mighty Effects arising from such a small Quantity: For this braces up the smaller Vessels, contracts the Pores of the Skin, and strengthens the Juices. I have often seen, that, upon the Drinking one or two Cups full of Claret, or sound Port, profuse Sweats have immediately been checked, and that even in colliquative Fevers.—Be cautious however of drinking Tea, or warm Liquors, which are of dangerous Consequences; nor indeed
are

are cold Liquors to be drank, whilst the Body is very warm, without the utmost Danger.

AUGUST.

Full Moon the 15th. New Moon the 29th.

The Weather this Month was sufficiently dry and warm, nay, sometimes very hot, which occasioned a most favourable and plentiful Harvest; nor were there wanting seasonable Showers, which greatly refreshed the Earth, which was quite burnt up; so that, at the End of *August*, the Face of the Fields was quite renovated and green.

The Wind was variable, but mostly to the northward, which always produced a serene Sky, and generally a warm one.

Rain 2. 5. 6. 7. 13. 19. 20. 21. 22. 25.
 Dig. Dec.
 26. = 2.140.

Prodigious Dews sometimes: Caterpillars and Grasshoppers innumerable.

Greatest Height of	8	16, 30.0, N.E. 1.	} Mean Height
Least	—	21, 29.2, S.S.W. 1.	
Coldest Day	25, 36,	E. S.E. 2.	} Mean Height 27 $\frac{2.6}{28}$.
Warmest	10, 20,	N. 1.	

The Small-pox were as yet very epidemic, and were now of a much worse Kind, being generally attended with livid Spots. Putrid Fevers of a long Continuance (perhaps *mesenteric*)

teric) were very rife amongst the lower Kind of People, and especially among the Sailors; some were attended with a Phrensy, but those destroyed the Patients much sooner. Such Persons generally had a swollen Abdomen, and were costive; as therefore upon this Account the bilious Colluvies were retained in the Viscera, they were very happily overcome by mild Purgatives. In this Case Sweats, and especially premature ones, and such as broke out at the very Beginning of the Disease, as they always most infallibly occasioned a Suppression of Urine, and a Want of Stools, a Phrensy soon coming on, were of no Manner of Service. It is surprising indeed often to see the Quantity of Bile that is discharged * *ἀνω καὶ κάτω*. Towards the End of the Month an Angina (and that generally a mucous one) was very common; Pains of the Teeth likewise, and Swellings of the Fauces, plagued several Persons. — The Cholera and Dysentery prevailed very much; and indeed this always happens after very warm Summers, not only upon the Account of the Bile's being burnt up, and the Humours of the Body being rendered more acrid, but also by the Pores of the Skin, which were quite open, being suddenly stopped up by the Setting-in of the autumnal Colds; by which Means that

* Ἡ μέλαινα χολὴ τὴ φθινοπώρῃ πλείστη τὴ καὶ ισχυροτάτη ἐστίν. *Hippocrat. de Nat. Hom. Sect. 25.*

Matter, which should have been carried off by Perspiration, falls in upon the interior Parts of the Body.

SEPTEMBER.

Full Moon the 14th. New Moon the 28th.

Altho' the Atmosphere was warm and dry in the Beginning of this Month, yet the Setting in of a rainy and tempestuous southerly Wind, about the 7th, intirely changed the Temperature of the Air: About the 20th, the very warm and fair Weather returned again, the Wind being generally easterly. In the mean Time there were great Dews; but, towards the End a southerly Wind again, and Rain.

A vast Number of Grafshoppers still amongst the green Herbs, which chirped very merrily.

Rain 4. $\frac{''' }{7}$. $\frac{'' }{8}$. 9. 10. $\frac{'}{14}$. 15 — 18. 25. $\frac{'' }{27}$.
 $\frac{'' }{28}$. 30. = 2.756.
 Dig. Dec.

A Storm the 7th at Day-break, S. S. E. 4.—The 13th, E. 4.—A very great Storm at *London*, and the northern Coasts of *England*, the 8th Day.—Lightning the 24th in the Evening.—A great *A. B.* for most Part of the Night of the 21st, N. E. 1.—The 27th, H. 9, p. m.

Greatest Height of	☿ 21, 30.1, N. E. 1.	} Mean Height
Least	8, 28.5, S. b E. 3 ^x .	
Coldest Day	30, 41, N. W. 1.	} Mean Height 32 $\frac{2}{16}$.
Warmest	23, 26, E. S. E. 1.	

The Small-pox still raged. Continual Fevers, and some irregular Intermittents, which observed a much more regular Period after a gentle Laxativeness, whether occasioned by Art, or spontaneously; and those were by a repeated Puke frequently intirely removed.

Numbers were plagued with a Swelling of the Fauces, and Pains in the Teeth and Ears; oftentimes these produced Abscesses in the auricular Passage: Some were seized with a violent Angina.

A Diarrhœa and Colic were common, which were easily cured by repeated Purges of Rhubarb; strong Purges certainly in general excited violent Pains.

O C T O B E R.

Full Moon the 13th. New Moon the 28th.

There being a very considerable Fall of Rain in the Beginning of *October*, the Atmosphere became much more humid; but, an easterly Wind, springing up the 9th, which continued to the 18th, rendered the Constitution of the Air for the most Part more warm and dry. Afterwards a south-westerly and a south-easterly Wind brought much Rain.

Rain $\frac{1}{1}$. $\frac{1}{3}$. $\frac{1}{4}$. $\frac{1}{5}$. 6. 7. 9. 13. 15. 19. 20.
 $\frac{1}{21}$. $\frac{1}{22}$. 24. $\frac{1}{25}$. $\frac{1}{26}$. $\frac{1}{28}$. 30. = 3.498. Dig. Dec.

A Storm the 21st at Night, S. W. 4x.—The 25th, at Night, S. E. b S. 4x.

Greatest Height of $\frac{1}{8}$ 14, 30.2, E. N. E. 1. } Mean Height
 Least ——— 21, 29.0, S. W. 4x. } 29.5 $\frac{3}{31}$.
 Coldest Day 18, 50, E. b N. 1. } Mean Height 43 $\frac{1}{31}$.
 Warmest 7, 36, S. W. 2. }

The Small-pox here and there: Several putrid and catarrhal Fevers: Defluxions also and Tumours in the Fauces, with a slight Angina, were common; but those which were unattended with any Fever were more so. Several were oppressed with the Asthma. A pustulary Fever (the Chicken and Pigs' or Swines' Pox) seized upon several Infants and Children; upon the Vanishing away of the Pustules, there were frequently Marks left, as in the Small-pox; which was an Indication of no small Acrimony in the Humours, and therefore required proper and demulcent Purgatives.—The old Nurses are very frequently most shamefully mistaken, whilst they reckon those Marks as the true Signs of the real Small-pox.—For the true Small-pox differ very greatly from those, as to the Time they continue, and also the Manner of their Maturation.—For the Chicken-pox disappear the third or fourth Day;

whereas

whereas the Small-pox do not go off, at soonest, until after the eighth Day.

N O V E M B E R.

Full Moon the 11th. New Moon the 27th.

In the Beginning of this Month the Wind was easterly, towards the Conclusion north-easterly, sometimes northerly, but oftener a rainy south-westerly and southerly Wind blew. The Atmosphere was generally very thick and warm, but towards the End came on a severe Frost.

Rain $\frac{1}{1}$. $\frac{1}{6}$. $\frac{1}{7}$. $\frac{1}{8}$. 16. 17. $\frac{1}{18}$. $\frac{1}{19}$. $\frac{1}{20}$. 21.

$\frac{1}{22}$. $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{25}$. 26. = 4.024. Dig. Dec.

Hail the 23d. — A Storm the 19th, p. m. S. W. 4^x. — A violent one the 25th at Night, S. W. 4^x. — Thunder and Lightning from the 8th p. m. unto Midnight. The 6th, S. W. 2.

Greatest Height of ☿ 14, 30.4, E. N. E. 1. } Mean Height
Least ————— 23, 29.2, S. W. b W. 3. } 29.3 $\frac{1}{30}$.

Coldest Day 30, 66, N. E. 1. }
Warmest 6, 41, W. S. W. 2. } Mean Height 52 $\frac{4}{30}$.

The Small-pox up and down.—The Measles but of an exceeding good Kind, were now very rife: A great Number of Children were seized with a pustulary Fever, and the Chicken-pox. —At this Time there seemed a somewhat peculiar Disposition in the Blood to producing Efflorescences; which is often remarkable, the Small-

pox, the Measles, the Pimples, and Pustules of all Kinds now prevailing together:—Probably the acrimonious and bilious Colluvies, which in the Months of *July, August, and September*, tormented the Intestines, now forcing its Way thro' the Pores of the Skin.—Are we from hence, or not, to infer the Method of Cure by Sweats, Blisters, &c. in Fevers, which rage in such a Constitution of the Atmosphere? Slow, nervous Fevers, and also bastard Peripneumonies, were scattered up and down. The Asthma, Quinsy, and Rheumatism common.

Coughs and Defluxions, with Swellings of the Fauces, and very severe Pains in the Teeth, plagued Numbers.

D E C E M B E R.

Full Moon the 11th. New Moon the 26th.

In the Beginning of the Month the Air was very dense, moist, and warm; after the 8th, it became much colder, and at the End very cold. The Wind was very often northerly, frequently south-easterly, especially in the Beginning of the Month, sometimes southerly. There was a most extraordinary Alteration in the Atmosphere the last Day of it, every Thing in the Morning being bound up by a most severe Frost, and in the Evening a perpetual Rain setting in, with a south-easterly Wind, which raised the Thermometer from 80 to 65 Degrees.

Rain

Rain 1. 5. 6. $\frac{1}{8}$. 9. 10. 15. 17 — 19. $\frac{1}{20}$.

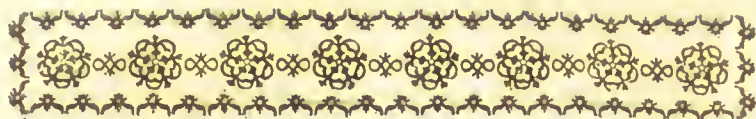
$\frac{1}{21}$. $\frac{1}{31}$. — Snow 25. $\frac{1}{29}$. — Hail 9. = 1.070. Dig. Dec.

A great deal of the Snow was blown away.

Greatest Height of	8	1, 30.2,	E. b S. 1.	} Mean Height
Least	9,	29.4	W. N. W. 1 ^x .	
				29.7 $\frac{4}{10}$.
Coldest Day	31,	80,	in the Morn, E. N. E. 1 ^x .	} Mean Height
Warmest	7,	50,	S. S. E. 2 ^x .	
				63.

The Small-pox still ; Measles common ;
 Qninseys, Pleurifies, Peripneumonies both true
 and spurious, in great Number : Rheumatisms,
 and violent asthmatic Paroxysms, seized several.
 Rheums, Defluxions, Coughs, Pains in the
 Teeth, Fauces, and Neck, and Swellings of the
 Head, every-where afflicted Numbers.





The whole Quantity of Rain for 1741 was
 Dig. Dec.
 = 20.354.



OF THE
A I R,
AND
EPIDEMIC DISEASES,
For the YEAR 1742.

JANUARY.

Full Moon the 9th. New Moon the 25th.

 Terrible Season, Storm, Rain, Hail,
 A  Thunder, and Lightning ushered in
 this Year, nor indeed was this whole
 Month much more agreeable, being very wet
 and squally. From the 13th to the 20th there
 was almost one continued Tempest, the Atmo-
 sphere in the mean Time being exceeding moist
 and very cloudy ; after this an easterly Wind
 in some little Measure dispelled the Clouds, but
 a south-westerly Wind, which brought with it
 very dirty Weather, quickly returned again ;
 in the very Conclusion of the Month the Wind
 was

was north-westerly. From the 7th to the 10th a sharp Frost.

Rain $\frac{''' }{1.}$ $\frac{'' }{2.}$ 3. 4. 6. $\frac{''' }{11.}$ 12. $\frac{'' }{13.}$ $\frac{'' }{14.}$ 15.
 $\frac{' }{16.}$ 18 — 20. 24 — 27. $\frac{'' }{28.}$ 29. 30. — Hail
 1. 2. 17. — Snow 7. p. m. E. N. E. 2^x.
 Dig. Dec.
 = 3.520.

A Storm the 1st, S. W. 4.—The 2d, at Day-break, W. S. W. 4_x.—A violent Storm all Night the 13th, S. W. 4^x.—The 14th, a. m. S. W. 4.—The 15th, W. b S. 4_x.—The 16th S. W. 4.—The 19th, S. W. 4.—The 28th, S. W. 4.

The Height of the Barometer was astonishing, considering what furious Storms there were.

Greatest Height of	8	22, 30.2, E. 1.	} Mean Height
Least	—	14, 28.8, S. W. 4.	
Coldest Day	10, 74, N. N. E. 1 ^x .	} Mean Height 57 $\frac{2}{3}$.	
Warmest	19, 50, S. W. 4.		

The Small-pox common : The Measles epidemic : Several Pleurifies, Peripneumonies, and Quinsseys : Numbers were plagued with the Gout and Rheumatism.

At the End of the Measles there very frequently came on a very violent Cough and Peripneumony, which rendered this Disorder not a little fatal : Upon the Coming-on of this,

Bleeding was immediately necessary; the Blood was generally very viscid and tenacious, and this was observable in almost all those who at this Season laboured under an acute Fever. Indeed it is no favourable Symptom for the Blood to be too thin, and over florid, which sometimes is the Case in the Quinsy and peripneumonic Disorders, and commonly proves a very fatal Omen.

F E B R U A R Y.

Full Moon the 8th. New Moon the 23d.

Altho' in the Beginning of this Month the Weather was sufficiently mild, yet a northerly Wind, setting-in about the 8th, rendered the Air much colder; after the 13th the Wind was variable, but on the 20th a northerly Wind returned again, with a smart Frost, which continued almost to the very End. The Atmosphere was very dry and cold, and the Station of the Barometer very high.

Rain 3. 4. 6. 12. 13. 15. 17. 18. 19. —

Snow 11. 18. 22. 23. 24. — Hail 21. 22.

Dig. Dec.
= 1.200.

An *A. B.* the 20th, N. 1. — A Storm the 6th at Night, W. S. W. 4.

Greatest

1742.]

Epidemic Diseases.

113

Greatest Height of	8	27, 30.4, E. N. E. 2.	} Mean Height
Least	—	19, 29.4, S. W. 2.	
Coldest Day	28, 68,	E. N. E. 2.	} Mean Height 61 $\frac{1}{2}$.
Warmest	1, 54,	W. 1.	

The Measles epidemic: The Small-pox here and there: The Rheumatism and Pleuro-pneumonies seized several, as likewise Coughs and Swellings of the Tonfils: A severe Gout and terrible Asthma were very common. Whenever an easterly Wind continues to blow for any long Time, * asthmatic Persons suffer very greatly; nay, I have known several, that, altho' they were shut up in a small Bed-chamber, perceived and foretold the Approach of such a Wind.

A consumptive Cough and foul Ulcers consumed and killed a great Number of Horses.

M A R C H.

Full Moon the 10th. New Moon the 25th.

This whole Month was exceeding dry and cold, and the Atmosphere very rare; there was scarcely one trifling little Shower, and no Snow. The Wind was always easterly, generally inclining to the North; hence we had often a severe black Frost, and very great Hoar-Frosts. The Tides were small, but the Mercury stood always high. — At the End of *March* they had very heavy Showers up eastward, but none here.

* See the Note (F), 1728, Vol. I, of the *Air and Epidemic Diseases*.

Dig. Dec.

Small Rain 26. 27. = 0.016.

A slight *A. B.* the 5th in the Evening, N. N. W. 2.—A very great one the 15th, H. 9, N. b E. 1.—The 16th, H. 10, N. b E. 1.—The 24th, H. 8, p. m. E. N. E. 1^x. A bright yellowish Zone, very much like a Rainbow, extending from N. E. to S. W. and passing thro' the very Body of the Moon, on the 6th, H. 9, p. m. N. b E. 1.

Greatest Height of	☿ 4, 30.5, N. E. 1.	} Mean Height
Least	21, 29.8, E. S. E. 1.	
		30.0 $\frac{1.8}{2.9}$.

Coldest Day	1, 68, N. E. 2.	} Mean Height 57 $\frac{2.7}{2.9}$.
Warmest	31, 51, N. b W. 1.	

The Small-pox here and there: The Measles epidemic, and often fatal: At this Time also Disorders of the Breast and Lungs were very rife: The Pulse was very quick and tense, the Breathing difficult, and a most acute Pain in Coughing; the expectorated Matter was thick and glutinous, but seldom tinged with Blood.—Bleeding, and warm diluting Liquors, drank freely, with the Addition of a good deal of Nitre, were the only Remedies. Coughs, Catarrhs, Pains in the Teeth and Fauces, plagued almost every one: Several also had the Quinsy and Rheumatism: An obstinate and violent Asthma troubled Numbers, and also long and severe Paroxysms of the Gout.—Almost all the Horses, unless they were well looked

looked after in the Stables, being plagued with Breakings-out, and a purulent Cough, became consumptive, and several perished.

A P R I L.

Full Moon the 8th: New Moon the 23d.

In the Beginning of *April* a seasonable Rain refreshed the thirsty Fields, and very soon after the grateful Earth brought forth a pleasant Verdure, and innumerable Flowers, which a very great Dew daily cherished; however a vast Number of all Kinds of Caterpillars were very destructive to them. After the 11th, the Wind, being almost constantly between the East and the North, made the Atmosphere very dry and thin.

Rain $\frac{1}{5}$. $\frac{11}{6}$. 7. 8. $\frac{1}{11}$. 12. $\frac{11}{22}$.——Hail 6. 11.

Dig. Dec.

= 1.152,

Greatest Height of ☿ 1, 30.4, N. b W. 1. } Mean Height
Least ————— 7, 29.0, N. W. 2. } 29.8. $\frac{1}{2}\frac{1}{6}$.

Coldest Day 7, 57. }
Warmest 23, 38. E. 1. } Mean Height 46 $\frac{2}{3}$.

More Small-pox every-where: The Measles epidemic, and often fatal: The Rheumatism, Quinsy, Pleurisy, and * Peripneumonies common: Ophthalmies also frequent. — The Blood now drawn from Persons in Fevers was

* See the *Essay on Fevers*, Page 21.

almost

almost always very fizy. Violent Coughs, Hoarsenesses, and Swellings of the Cheeks and Tonfils, afflicted Numbers. — The Season now was very pernicious to consumptive Persons :

* Some tertian and semitertian Fevers.

A contagious, putrid Fever, and very pestilential, attended with a great Loss of Strength, a great Oppression of the Præcordia, Tremor, and Twitching of the Tendons, Restlessness, Delirium, black Tongue, and oftentimes very dry furred Fauces, and a very stinking Breath, now raged very much about *Launceston* and its Neighbourhood, and proved very fatal. — The Pulse was very fluttering, even in the very Beginning of the Disease, and that too in very robust People : The Urine was generally dark, and as it were vapid, often blackish and foetid, had seldom any Sediment, but sometimes contained in it some bran-like Matter unequally scattered. Frequently Petechiæ, and those very black, broke out in the State of this Fever ; often Pimples, or livid Pustules, with an oily and very foetid Sweat : Nothing was a more favourable Omen than florid Pustules in the very *Ἀκμή* of the Disease ; whereas nothing was more fatal than livid and blackish ones. Mere Spots always denoted some Evil. Black Stools, and very foetid and frequent, brought Numbers to their End. Some after their Restless-

* See *Essay on Fevers*, Page 21.

ness were seized with a Phrensy, many more with a Lethargy, and that frequently in the very Beginning of the Disease ; if without the Perception of these Patients themselves they voided a Stool, Death was the certain Consequence, and that within two Days.

This Fever, which took its Rise from Prisons, and which was disseminated far and near by the County Assizes, occasioned the Death of Numbers, and foiled frequently the best Advice. — Those who bled too profusely, killed the Patient infallibly, and not the Disease ; for they very seldom ever bore a second Bleeding, if indeed any.

As I was at that Time in an ill State of Health, I only saw three Persons labouring under this Disorder, as I was obliged to return Home soon : But, upon a careful Inquiry among the Apothecaries and Surgeons about this Disorder, I learned, that the Blood drawn from the Sick was at first sufficiently red, and very thin ; but that which was taken off a second Time was always livid or black. — This indeed I have myself observed ; nay, that in the Blood of a certain Gentleman there was no Coagulum, altho' it had been drawn a long Time before. This Person, greatly regretted by his own Family, and every one, died on the 13th Day from his Seizure, being stupid, delirious, and covered

covered over with purple Spots and livid Pustules.

Who knows not what happened at the *Oxford* Assizes, 1577, and lately at those of *Taunton*, in the Year 1730, where the pestilential Stench proved fatal to so many and great People? Indeed, the Production of a pestilential Fever, in close and nasty Prisons, is very common; nay, the very Air itself, which is pent up in Mines, Caverns, and Wells, at length proves exceedingly pernicious, and that too very much sooner, if a considerable Quantity of the Effluvia of Animals be joined to it; which of themselves become every Hour more and more virulent, and in a very short Time highly pestilential*.—A stagnant Atmosphere, still further corrupted by a Number of People, very soon becomes rancid, and altogether unfit for the Uses of Respiration; nay, a Bath of fresh Water, being impregnated with the cutaneous Filth of Persons that have bathed in it, grows putrid, and in a very short Time stinks.—Nor indeed is this at all surprising, since there are almost 40 Ounces of rancid Va-

* There is a remarkable Account of this in *Lancifsi*, (Lib. 1, Cap. 6, de repentin. Mort.) concerning a young Man, that was immediately suffocated, whilst he was felling an old Oak, which had a very large Serpent concealed in the Hollow of it.

pour which are exhaled daily from every grown Person.

All these Effects much sooner take Place by the Accession of Heat ; since, by how much the more the animal Salts and Oils are attenuated and put into Commotion by the Warmth, they so much the sooner tend to Putrefaction. — Now the Bodies of all putrescent Animals, especially of Men, always disperse more or less Contagion ; and therefore, after great Slaughter in the Field of Battle, generally arise pestilential Fevers. — Indeed the Stench of putrid Flesh is altogether intolerable, Nature hereby directing us to avoid it as soon as possible. — Indeed, when the Bodies of sick Persons throw out a very offensive Smell, there is the greatest Occasion to guard against the Contagion ; for the noxious *Miasmata* diffuse themselves exceedingly. This is particularly remarkable in the Maturation of the Small-pox ; since at this Time they smell very offensively, and are vastly more contagious than they are in the Beginning of this Disease, as every one knows.

The Air therefore which is greatly corrupted in Prisons, Ships, and Hospitals, where a great Number of People are crowded together, is frequently to be purified and ventilated, lest, by its longer Continuance, it should become pestilential ; — nay, if it should any Way be polluted, it should be corrected by proper Fumigations,

migrations, the most serviceable of which is the Vapour of Camphor and Vinegar.

This Purification of the Air also will be very proper in those private Houses in which the Sick have lodged; by frequently opening the * Windows, lighting Fires, &c. since by those Means not only the Sick themselves, but also the Persons who attend them, breathe a purer Air.—I remember my being frequently affected with an Head-ach, Nausea, and Faintness, whilst I had been visiting Persons in a malignant Fever, for two or three Hours; but I was very soon recovered by walking or riding in the pure Air. If this cannot be done, snuff up every now and then some very sharp Vinegar mixed with Camphor, and as often as possible discharge your Spittle.

M A Y.

Full Moon the 8th. New Moon the 23d.

In the Beginning of *May* we had an easterly Wind, and that a strong one; but, from the 16th to the 24th, a rainy south-west Wind rendered the Atmosphere, which before was very dry, exceeding moist. Those Showers were not only very grateful in watering the Grounds, but more in destroying likewise the Caterpillars; for at this Time that Pest of the Herbage very greatly abounded. Besides this, great

* See the *Essay on Fevers*, Page 162.

Detriment threatened the Harvest from a new Species of black Caterpillars, very strong and large, which rushing down in a vast Body from the Mountains, like a Torrent, devoured whole Fields. The Earth was most beautifully and unusually ornamented with an infinite Number of Flowers.

Rain $\frac{''}{6}$. $\frac{'''}{7}$. 15. 16. $\frac{'}{17}$. 18. $\frac{'}{19}$. $\frac{'''}{20}$. 21—24.
Dig. Dec.
30. = 2.364.

A Storm the 4th, E. b S. 4.—The 5th, E. S. E. 4.
—The 6th in the Morning, E. S. E. 4_x.—An exceeding large Halo about the Moon the 5th, H. 9, p. m. E. S. E. 4.

Greatest Height of	8	1, 30.2, E. b S. 2.	} Mean Height
Least	—	21, 29.4, S. W. 3.	
			29.6 $\frac{2}{3}$.
Coldest Day	5,	48.	} Mean Height 38 $\frac{1}{3}$.
Warmest	24, 32,	S. S. W. 2 _x .	

The Measles very epidemic : Small-pox and Peripneumonies common : A Cough and Asthma troubled Numbers : Many died of a Consumption : Several laboured under a Dropsy. A Kind of a catarrhal and rheumatic Fever crept about here and there, in which the Tongue was blackish, or of a dark brown Colour, and very foul, Aphthæ in the Mouth, stinking Breath, lurid Urine, quick, feeble, low Pulse, frequently also livid Petechiæ, a slight Cough, but a vast Oppression upon the Præcordia.—

In my Opinion this was a Species of the malignant Peripneumony, which was lately so rife.

J U N E.

Full Moon the 7th. New Moon the 21st.

Not so much as the least Drop of Rain fell until the 20th of *June*; the Atmosphere in the mean Time was very dry and warm, and the Wind between the East and the North; but afterwards a southerly Wind brought with it a good deal of Rain.

	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>
Rain	20.	21.	22.	23.	25.	26.	27.	28. 29. 30.
Dig. Dec.								
=	2.020.							

A very large Halo about the Moon the 3d, H. 10, p. m. N. N. E. 2.—Thunder and Lightning the 25th, in the Evening.

Greatest Height of	☿	4, 30.1, N. E. 2x.	} Mean Height
Least	————	26, 29 3, S. W. b S. 1.	
Coldest Day	3, 32,	N. N. E. 2.	} Mean Height 25.
Warmest	13, 17,	N. 1x.	

The Measles were very epidemic, and often fatal, being succeeded by a very violent Cough, and a Kind of peripneumonic Fever, which carried off several Infants. When the Cuticle was very rough, and as it were sprinkled over with Bran, the fourth or fifth Day from the Eruption, it was a good Sign; on the contrary, when there were Spots, or darkish livid Pimples,

Pimples, it was a very bad one. — A putrid Fever here and there, which was frequently attended with red, angry Pustules, and often with very large Petechiæ. Quinsies, Pleurisies, Peripneumonies, were more common than they usually were at this Season. Besides these, there were several Ophthalmies, and erysipelatous Swellings in the Head. — A violent convulsive Cough frequently attacked not only Children, but even grown Persons, especially at the End of this Month. A great Number of mad Dogs.

J U L Y.

Full Moon the 6th. New Moon the 20th.

The Weather was cold, and generally rainy, until the 25th Day of *July*, the Wind varying almost every Day, being at one Time north-west, at another south-west; whilst the Atmosphere in the mean Time was dense and much moiſter.

Rain $\frac{'''}{1}$. 2. 3. $\frac{''}{5}$. 7. 9. 10—13. $\frac{'}{17}$. $\frac{'}{18}$.
Dig. Dec.
19—21. $\frac{'''}{23}$. 24. 25. = 2.106.

Greatest Height of	♂ 27, 30.1, E. N. E. 1.	} Mean Height
Least	19, 29.2, S. W. b S. 2.	
Coldest Day	26, 38, N. N. W. 2.	} Mean Height 31 1/4.
Warmest	31, 22, E. 1 ^x .	

Almost the very same Disorders still prevailed, but the Coughs were more violent, and the

Patients frequently brought up Blood.—Several Persons now laboured under the Jaundice and Dropsy. In very dry and warm Seasons the bilious Principle in the Blood is increased, the most volatile Parts are dissipated, and the grosser ones remain; hence arise Obstructions, the Jaundice, and Dropsy, the lymphatic Vessels being broke, and by those Means an *Ascites* frequently follows the Jaundice.

At the Close of this Month I lost my dear Wife in a Dropsy, greatly lamented by all her Friends, her Neighbours, and indeed by every worthy Person. She was a Woman truly pious, discreet, and agreeable as to her Person. She was about forty, slender, active, and exceeding temperate; somewhat weakly however in her Constitution, and descended, alas! from an hydropical Race. She was never once before troubled with the slightest Symptoms of the Dropsy, except upon her going, about eleven Months before, in a Coach, about ten or twelve Miles from Home, and, being drove very fast, her Legs and Feet swelled very greatly.—But the Continuance of this was very short, since all the Swelling intirely vanished the very next Day.—In this last Spring however, after a very severe and painful Fit of the Colic, being disfigured with a Jaundice Complexion, she became languid, emaciated, discharged very little Urine, and that very thick, and exceeding
yellow,

yellow, nay, even blackish.—At length a watery Swelling attacked her Legs, Thighs, and also her Abdomen.—She immediately went into the Country, rode out every Day, and I diligently tried the Use of *Emetics, Cathartics, Diuretics, saponaceous Medicines, Deobstruents*, in short, the best and most proper Kinds of Physick; having consulted two or three very eminent Physicians.—She now in all Respects seemed to be much better, unless that she discharged but a small Quantity of Urine, and that always turbid and blackish. This however was an exceeding short Truce, for very soon after all the former Evils returned; so that, at the Close of *May*, the Jaundice and the Swelling, both of the Legs and Abdomen, came on again: The *Ascites* now likewise increased daily, to that Degree, that the vast Body of Water now almost suffocated her, whenever she lay down, the *Septum Transversum* being forced upwards.—Recourse therefore was immediately had to the *Paracentesis*, which she bore with great Resolution: There was drawn off from her about a Gallon and a Half of greenish Serum, which concreted at the Fire.—In two or three Days Time she found herself surprisingly recovered, nay, her Appetite, and even Strength, returned again. She again went into the Country, rode with Spirits: The Yellowness of the Skin vanished, the Eyes became vivid, and Respiration

easy.—I had now entertained the most pleasing Hopes of her Recovery ; but how vain were these ! Within the Space of three Weeks the Swelling of the Abdomen increased again to a monstrous Degree ; we again therefore drew off almost the same Quantity of Water ; but this was ichorous, foetid, bloody, and not coagulating the least by the Fire.—From the Opening made by the Trochar, a large Flux of whitish, purulent, stinking Humour now issued ; which carried off this excellent Matron, *July* the 27th. But where am I hurried by my Affection to my dear Wife ? Yet, *Quis Desiderio sit Pudor, aut Modus tam cari Capitis ?*

————— Ὀλύμπια Δώματα ναίει.

AUGUST.

Full Moon the 5th. New Moon the 19th.

All this Month we had most beautiful Weather, the Harvest was exceeding favourable, and the Corn excellent. The Atmosphere also was very dry and pure ; the Wind generally easterly, and frequently it was very warm : Now and then there were very great Dews. An infinite Number of Wasps, Grasshoppers, Caterpillars : A great many mad Dogs.

Rain 16. $\frac{11}{17}$. 26. 27. = 0.434. Dig. Dec.

Greatest Height of	8	9, 30.1, E. b N. 1.	} Mean Height
Least	16,	29.5, S. 2 ^x .	
Coldest Day	19, 34,	E. 2 ^x .	} Mean Height 26 $\frac{2}{3}$.
Warmest	3, 18,	E. 1.	

The Measles still epidemic; the Small-pox up and down; the Cholera common; some intermitting Fevers, but chiefly Quotidian; otherwise very few Disorders.

S E P T E M B E R.

Full Moon the 3d. New Moon the 17th.

This Month was in general also very dry, but very cold for the Time of Year; nay, upon the 12th in the Morning, there was Ice upon several Pools, and a very great Hoar-Frost in the Fields. The Wind was often westerly inclining to the South, but oftener to the North; from the 16th to the End it blew north-easterly. Almost all the Springs were dried up by the excessive Heat: Very great Dews and Hoar-Frosts frequently.

Rain 2. $\frac{1}{4}$. 6. 7. $\frac{1}{8}$. 9. $\frac{1}{10}$. 11. 14. 27. $\frac{1}{28}$.

Dig. Dec.

29. = 1.402.

Greatest Height of	8	18, 30.0, E. N. E. 1.	} Mean Height
Least	29,	29.1, N. 2 ^x .	
Coldest Day	12, 55,	N. b E. 1 ^x .	} Mean Height 41 $\frac{1}{3}$.
Warmest	1, 29,	S. W. 2.	

The Cholera, Ophthalmy, Small-pox, and putrid Fevers here and there: Young Persons were very much troubled with Worms.

Some slight Fevers, with a Kind of Angina, Cough, Tooth-ach, and Swelling of the Fauces, were very common : A gentle Sweat, or a mild Cathartic, very speedily and easily removed them. The sudden Setting-in of the autumnal Cold, which very greatly lessened the *Sanctorian Perspiration*, was unquestionably the Cause of this slight Fever.

The Measles, which were epidemic, and frequently fatal, were in general attended with a very violent Cough, from whence it was no uncommon Thing for a suffocating Peripneumony to arise in the Conclusion. Sometimes the Patients expectorated frothy and pure Blood; and hence frequently followed very speedily Death, or a certain Consumption.—A mucous, very watery, and excessive Diarrhoea often succeeded the Measles. This occasioned a very hard and tense Abdomen, whilst all the rest of the Body was exceedingly thin, and at length fatally consumptive; and this was always the Case, when the Stools were very black and foetid.

The best Remedy, both for the Cough and Peripneumony, was timely Bleeding, opening the Bowels by a gentle Clyster or mild Cathartics; at the same Time you might restrain the Violence of the Cough by Diacodium, and divert the acrid Defluxion by applying a Blister between the Shoulders; it was necessary also to enjoin a soft diluting Regimen, and an intire

Abstinence.

Abstinence from all Kinds of Flesh. Whenever the pustulary Eruptions either suddenly sunk in, or turned livid, or of a Lead-colour, there came on immediately a very great Oppression of the Præcordia, Anxiety, Delirium, &c. In such a Case the whole Body is to be rubbed all over very well with linen or woollen Cloths, and moreover Recourse is to be had to proper Cardiacs, of which Kind are *Lap. de Goa*, *Croc. Anglic.* *Mosch.* *Camphora*, given in some moderate Julep, or warm Wine; nor indeed do I know any better or safer than those, when the Measles strike in, or are less florid in their Appearance. Upon the Eruption of the Measles great Precaution is to be had against the cold Air, and Shirts damp with Sweat; since from hence very frequently the Exanthemata are struck in. The Patient however is not in the mean Time to be too closely stoved up, or loaded with too many Bed-cloaths, as these increase the Difficulty of Breathing, and occasion immoderate Sweats, especially in grown Persons, which is a Thing of the most pernicious Consequence. — Moreover, upon the Going-away of the Measles, there very often comes on a Diarrhœa, in regard to which the greatest Caution is to be used; nor is it to be restrained too hastily: In this Case then give now and then a moderate Dose of Rhubarb, with toasted Nutmeg, and Decoct. C. C. C. — *Oryzæ* — *Fracastor.*

I also

I also prescribe some absorbent Mixture, of Corall. rub. lævig. with Bol. Armen. and simp. Aq. Cinnam.

OCTOBER.

Full Moon the 3d. New Moon the 17th.

There was now a great Change in the Constitution of the Atmosphere, there being now a very considerable Fall of Rain, and it having also been very stormy both in the Beginning and End of the Month : In the Middle of it, however, there was fine sun-shiny Weather ; the Wind being, from the 15th to the 22d, generally north-easterly ; the Atmosphere was much more dense and humid.

Rain $\frac{''}{2}$. $\frac{'}{3}$. 4. $\frac{''}{5}$. 6. $\frac{''}{7}$. $\frac{''}{8}$. 9. 10. $\frac{''}{13}$. 14.
 16. $\frac{'}{17}$. 25. $\frac{'''}{26}$. 27—29. $\frac{''''}{30}$. $\frac{''''}{31}$. — Hail 3.
 $\frac{'}{27}$. 31. = 4.960.
 Dig. Dec.

A very high Tide and Storm the 2d in the Evening, W. S. W. 4. — A Storm the 3d early in the Morning, and a. m. N. W. 4. — A stormy Night the 5th, W. S. W. 4_x. — Also the 7th, S. S. W. 4_x. — The 26th, W. N. W. 4. — A Storm with Lightning the 27th, at Break of Day. — The 29th, at Night, S. W. b W. 4. — The 30th, S. W. b W. 4. — The 31st p. m. S. S. W. 4. — Ice the 20th, 21st, and 29th.

1742.]

Epidemic Diseases.

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Greatest Height of ☉	22, 30.2, E. N. E. 1 ^x .	} Mean Height 29.6 $\frac{4}{11}$.
Least	3, 28.8, N. W. 4.	
Coldest Day	28, 59, N. N. W 2.	} Mean Height 47 $\frac{1}{2}$.
Warmest	10, 40, S. W. 3.	

Rheumatisms and a Diarrhœa common :
 Some Dysenteries : Hoarsenesses, Asperities,
 and Swellings of the Fauces, plagued Numbers :
 The Small-pox still rife up and down, and those
 of a very bad Kind, being generally attended
 with livid Petechiæ : Nay, the very Measles
 themselves at this Time, turning livid, destroy-
 ed more than the Small-pox, especially grown
 Persons, who, being seized as it were with an
 universal Mortification, died short-breathed,
 suffocated, and quite stupid. — Nothing was a
 more favourable Event than a broken and very
 rough Skin, at the Going-off of the Measles.

N O V E M B E R.

Full Moon the 1st. New Moon the 16th.

Full Moon the 30th.

This Month was very rainy, and cold, and
 often very stormy. In the Beginning of *No-*
vember the Wind was westerly, but, from the
 10th to the End, easterly, generally inclining
 to the North ; sometimes, nevertheless, it was
 south-easterly.—The Weather during the whole
 Month was cold, dark, and moist.—The Station
 of the Barometer low.

Rain

Rain	$\frac{''' }{1.}$	$\frac{'}{2.}$	$\frac{'}{4.}$	$\frac{'}{5.}$	$\frac{'}{6.}$	$\frac{'}{7.}$	$\frac{'' }{8.}$	$\frac{'}{9.}$	11.	$\frac{''' }{13.}$	$\frac{''' }{20.}$	
	$\frac{'' }{21.}$	22.	$\frac{''' }{23.}$	$\frac{''' }{25.}$	$\frac{''' }{26.}$	$\frac{''' }{29.}$	30.	— Violent Hail 1.				
	Dig. Dec.											
— Snow	16.	= 5.267.										

A Storm the 1st, p. m. and the Night following, S.W. 4x. — The 10th at Night, E. 4x. — The 25th, at Night, S. E. 4x. — A violent one the 30th, early in the Morning, E. S. E. 4x. — A severe Frost the 15th, 16th, and 29th.

Greatest Height of	8	28, 30.0, N. E. 1.	} Mean Height
Least	—	23, 28.7, E. S. E. 3.	
Coldest Day	29, 68, N. N. E. 1.	} Mean Height 59 $\frac{1}{2}$.	
Warmest	1, 53, S. W. 4x.		

The same Disorders still prevailed; but the Defluxions, Rheums, Coughs, and Rheumatisms were much more severe,

DECEMBER.

Frequently a north-easterly, frequently a south-easterly Wind blew during this Month, which made the Station of the Barometer very high; from the 18th to the 22d a south-west Wind intervened, accompanied with a Fall of Rain; — nor did even this sink the Mercury, but it rose even higher, so that, upon the 22d, it got up as high as 30.4. — This indeed was what surprised me not a little; however, the Atmosphere was very dense, and an easterly Wind prevailed for some Days. — Towards the

End

End, however, a south-west Wind returned. Frequently a smart Frost in the Beginning of this Month; from the 12th to the 17th a very severe one.

Rain 18. $\frac{11}{19}$. 20. 23. 27. $\frac{11}{28}$. 29. $\frac{1}{31}$. —

Dig. Dec.

Snow 3. 7. = 1.342.

A violent Wind the 14th and 16th, E.N.E. 4x.

—A Storm the 28th, in the Morning, S.W. 4x.

—Circius violent the 30th, p. m.

Greatest Height of ☉	22, 30.4, S.S.W. 1x.	} Mean Height
Least	29, 29.6, S.W. 3x.	
		30.0 $\frac{5}{31}$.

Coldest Day	15, 76, E.N.E. 2x.	} Mean Height 63 $\frac{12}{31}$.
Warmest	31, 51, S.W. 3x.	

A laxative and painful Disorder in the Bowels, and sometimes even attended with Blood, affected Numbers. Several laboured under a grievous Asthma. — Coughs, Hoarsenesses, Swellings of the Throat, and a slight Angina also. The Small-pox here and there; many Rheumatisms; some Peripneumonies; and also slow, putrid Fevers.

The whole Quantity of Rain, for the Year
Dig. Dec.
1742, amounted to = 25.783.



OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1743.

JANUARY.

New Moon the 14th. Full Moon the 28th.

 HE Atmosphere was very dense and moist during almost the whole Month, and in general also cold; at the same Time that the Station of the Barometer was sometimes very high, owing to the great Density of the Atmosphere. The Wind at the Beginning was westerly, but, from the 9th to the 18th, easterly, inclining to the North, and this was cold, and attended with Ice. From that Time we had a south-west Wind, which was much warmer.

Rain

Rain $\frac{''}{1.}$ 2 — 4. $\frac{''}{5.}$ 7. 8. 10. 19. 24. $\frac{''}{25.}$

Dig. Dec.

26. 28. 31. — Hail 6. = 1.512.

A great *A. B.* the 12th, H. 8. p. m. — A very stinking Fog the 22d, a Calm. — A Storm the 5th, almost all Day, W.S.W. 4. — The 26th p. m. and in the Night, S.W. 4x.

Greatest Height of ☽ 11, 30.7, E.N.E. 1. } Mean Height
Least ————— 26, 29.3, S.W. 4x. } 29.9 $\frac{29}{29}$.

Coldest Day 21, 69, N.N.E. 1. } Mean Height 59 $\frac{29}{29}$.
Warmest 7, 52, S.W. 3. }

The Small-pox yet up and down : Rheumatisms, Pleurifies, and a great Number of Coughs : The mucous Angina, Swellings of the Fauces, and Pains of the Teeth, common : Some slow Fevers. Several Deer died every-where.

FEBRUARY.

New Moon the 13th. Full Moon the 27th.

The Constitution of the Atmosphere still continued dense and moist, but it was somewhat warmer ; the Wind was very uncertain, as it shifted almost every Day ; however, in general, it was north-westerly.

Rain 1. 2. $\frac{''}{3.}$ $\frac{'}{4.}$ 6. 9. $\frac{''}{11.}$ 13. 14. $\frac{'}{15.}$ 22.

Dig. Dec.

23. $\frac{'}{25.}$ 27. = 1.584.

A Storm and Lightning the 3d, p. m.
S.W b W. 4.

Greatest

Greatest Height of ☿	8, 30.2, N.W.bW.1.	} Mean Height
Least	3, 29.3.	
Coldest Day	20, 64, N.E. 1.	} Mean Height
Warmest	9, 51, W. 1.	

29.8 $\frac{1}{2}$

54 $\frac{2}{8}$

A catarrhal Fever, and the Small-pox, up and down : A Cough, with a Swelling of the Fauces, Tonsils, and often a slight Quinsey, plagued innumerable Persons : Some tertian Fevers. This was far from being a very unhealthy Season ; but several Persons, and even those too elderly, were tormented with round Worms. A most nasty Mange still amongst the Horses, which had now continued amongst them a long Time.

M A R C H.

New Moon the 14th. Full Moon the 28th.

March, which now succeeded, was cold, and the Temperature of the Air much drier. In the Beginning of the Month there were frequent Calms, but at the Close we had a stormy Season, which sunk the Barometer very much. From the 7th to the 21st the Wind was north-easterly, and there was now and then a Frost.

Rain 1. 3. 6. 11. 13. 22. 25. 26. 27. 28.

29. 30. — Snow and Hail 7. 10. 11. 23. 25.

Dig. Dec.

30. = 2.946.

A very

A very great *A. B.* the 8th in the Evening, N. N. E. 1.—Some very bright, small Clouds, which seemed to follow the Tract of the Wind.—A Storm the 25th, S. W. 4.—The 26th, from Day-break, all Day S. W. b S. 4; but in the Evening, and all Night, the Wind *Circius* blew most violently. — A very violent Whirlwind the 28th, from 5 p. m. to the 9th, W. N. W. 4^x.

Greatest Height of ☿	15, 30.2, N. b E. 1.	} Mean Height
Least	26, 28.8.	

Coldest Day	8, 66, N. N. E. 1 ^x .	} Mean Height 55 $\frac{2}{3}$.
Warmest	5, 51, a Calm.	

The Small-pox rife : Several more intermitting Fevers, both Quotidians and Tertians : The Rheumatism, and Gripings of the Bowels, up and down : Coughs every-where : Head-achs, Pains in the Teeth, Swellings of the Head and Tonsils, with an Asperity of the Fauces, plagued Numbers.

The Mange disfigured the Horses very greatly ; several, becoming quite Skeletons, died, and some were suffocated with the Glanders and a Cough.

A P R I L.

New Moon the 13th. Full Moon the 27th.

The Beginning of *April* was very cold, but the latter Part thereof sufficiently warm. The

Wind was northerly until the 11th, and there was frequently Snow, Hail, and Frost. From the 13th to the 17th it was easterly, afterwards variable; but in general however southerly.

Rain 1. $\frac{1}{4}$. 5. 8. 11. 13. 14. 18 — 21. $\frac{1}{23}$.
 $\frac{1}{25}$. $\frac{11}{26}$. 27. 28. — Hail 1. 4. 5. — Snow 2.
 Dig. Dec.
 5. 6. = 1.662.

A small *A. B.* the 1st, H. 8, p. m. N. b E. 2.
 —Thunder and Lightning the 21st at Night.
 —A violent Gallic Wind Circius the 22d.

Greatest Height of	8 6, 30.1, N. 1.	} Mean Height
Least	26, 29.3, S. S. W. 3.	
		29.7 $\frac{5}{9}$.
Coldest Day	2, 64, N. 2 ^x .	} Mean Height 49 $\frac{2}{9}$.
Warmest	30, 35, S. S. W. 2 ^x .	

The Small-pox still: Several * intermitting Fevers, especially Tertians: Several Pleurifies and Peripneumonies: A putrid Fever here and there, generally attended with miliary Eruptions; all the Patients were in the Beginning seized with a slight Quinsy; and towards the End there was a great Desquamation of the Cuticle.—Several died consumptive.

A bloody Dysentery attacked and killed several Persons, but chiefly among the lower Kind of People; there were almost always round Worms discharged by the Sick, even by the Adults and the more elderly Persons.—I know

* See the *Essay on Fevers*, Page 20.

not indeed to what this was owing ; but, for several Months before, both elder Persons, as well as younger People, were more troubled with Worms than ever I remember. Was not this owing to an immense Quantity of all Kinds of Fruit, which the Summer and Autumn of 1742 abounded every-where with ? It is certain, that the common People, whenever there is a Plenty of these Fruits, make a very free Use, or rather a very great Abuse of them, as they are constantly devouring immense Quantities of Cherries, Plums, and Apples.

This Dysentery raged very greatly in the Town of *Plympton*, and its Neighbourhood, being a very fat and moist Soil, and very unhealthy, especially in Regard to slow and intermitting Disorders : This continued, however, from the Beginning of *April* to the End of *May*.—This Disorder was generally attended with a Fever, or, I might more properly say, that this was a Symptom of the Fever ; for frequently from the very Beginning, and before any violent Gripings came on, a slight feverish Heat, with a quick Pulse and furred Tongue, seized the Patient ; nay, very often this Disease attacked People with a very visible Shivering, and not uncommonly observed the same Stages as a semi-tertian Fever.—I do not know indeed whether this was the same epidemic Fever translated to the Bowels, which I am presently to

M 2

describe ;

describe ; but this I have found, that an epidemic Dysentery is not frequently the * Produce of the Spring.

However this might be, there was always more or less of a Fever ; for which Reason I always took Care to bleed in the Beginning of the Disease, lest the Inflammation of the Intestines should become more violent, and by that Means the Gripings should be more severe, and at length the Mortification more certain. — In the Beginning of this Disease there was always a Nausea, and an Inclination to Puke ; following therefore the Directions of Nature, I always advised to wash out the Stomach by giving a Decoction or Infusion of Ipecacuanha, working it off at the same Time with Rice-Gruel or Chicken-Broth, drank freely. After this was over, you are to give now and then Rhubarb, with some diluting and demulcent Liquor liberally ; by which the Acrimony of the Juices, both in the Blood and Viscera, is softened down, at the same Time that the Rhubarb expels the acrid Colluvies. So very necessary indeed are gentle Purgatives in the Beginning of every Dysentery, that, if it is omitted, and Astringents and Opiates prematurely given, it is succeeded immediately by the most violent Grip-

* (Δυσεντερία) γίγνεται Θίξενς ὥρη, δεύτερον φθινυπώρον, ἥσσον ἥλιος, ἥκιστα χειμῶντος. *Aret. Cappad. Cap. de Dysenteria ad Finem.*

ings, Sicknefs of the Stomach, Singultus, Aphthæ, and at length a Mortification of the Intestines, which is soon followed by Death.— This Admonition ought always to be attended to in the Cure of Dysenteries, but, in this which I have now been treating of, it is exceedingly necessary; as, in the Progress of this Disease, round Worms are almost always constantly voided. What can we hope for, when an Enemy is lodged in the inmost Parts of the Bowels? What if you should dislodge this Enemy with Calomel? I have indeed very often done this without any ill Consequence, nay, I have hereby frequently obtained an happy Conquest.

Not that Purgatives are so much to be insisted upon, as if the Nature of the Disease required nothing else; since now and then it was requisite to lull it with Anodynes, and also to restrain the too great Flux of Humours, and in the mean Time to strengthen the Intestines.—To answer these Purposes, the Decoction (as it is called) of *Fracastorius* served very well, (especially with the Addition of a little toasted Nutmeg or Cinnamon) provided it was given in a proper Dose, and, if necessary, assisted with Extract. Thebaic. A Decoction also of C. C. C. or Fresh-Milk boiled up with half the Quantity of Spring-Water, and a little Cinnamon; or very thin Whey, in which an hot Iron had been cooled, was to be supped up now and then.

Should there be an Abundance of acrimonious Bile, the Dyſentery very bloody, and a large Quantity of pure Blood voided, Tincture of red Roſes well acidulated, or ſome rough red Wine, ſomewhat diluted, will prove beneficial. — In general, towards the End of this Diſeaſe, a very terrible Falling-down of the Inteſtines, and a perpetual Attempting to go to Stool, tormented the Patients. Nothing relieves this Complaint ſo much as Diaſcordium, or Theriaca Andromachi, given in a Clyſter with new Milk, or the white Decoction. I ſhall however ſay more about the Dyſentery bye-and-bye.

Towards the End of *April* a Kind of Fever, in general ſlight, but ſometimes not a little fatal to old Men and Children, who had weak Lungs, raged through all this Country. — At once, and at the ſame Time, innumerable Perſons were ſeized with a wandering Kind of Shiver, and Heavineſs in the Head ; preſently alſo came on a Pain therein, and alſo in the Joints and Back ; ſeveral however were troubled with a univerſal Laſſitude. Immediately a very great and acrid Deſluxion from the Eyes, Noſtrils, Fauces, and very often falling upon the Lungs, which occaſion almoſt perpetual Sneezings, and commonly a violent Cough : They all likewiſe laboured under a great Straightneſs and very great Load upon the Breſt. On the
ſecond

second Day the Fever grew so strong, that the Pulse became very much quicker, and the Difficulty of Breathing was very greatly increased, especially if Bleeding had been neglected. There was no very urgent Thirst; but the Tongue was very white, and looked as if rubbed over with Cream: The Eyes were slightly inflamed, and, being violently painful in the Bottom of the Orbit, shunned the Light.

This slight Fever did not proceed in one and the same Tenour; but at one Time a Shivering, then presently a burning Heat, came on, without any Manner of Regularity, except that frequently it terminated at length in a Tertian or * Semi-tertian. However a * Peripneumony, or a Pleuro-pneumony, which sometimes was occasioned by a too large Quantity of Blood, and the Violence of the Cough, (particularly to such Persons who had used a warmer Regimen and Course of Medicines) was of far worse Omen. Nor was a Pleurisy, or a sharp * Rheumatism, uncommonly produced from the same Cause, especially if Bleeding had been omitted in the Beginning of the Disease.

The Blood drawn off was sometimes very fizy, but nevertheless generally florid, but not abounding in Serum; it was various however in different People, yet, the higher the Fever

* See the *Essay on Fevers*, Page 20.

ran, so much the more tenacious. Indeed, whatsoever the State of the Blood appeared to be, this Disease would not admit of any great Loss of Blood; nay, if there was any Thing of a Peripneumony which came on, it would by no Means bear plentiful Bleeding, without the greatest Ruin of the Strength, and seldom more than barely once. Nor indeed did I only make this Remark in this Fever alone, but it was always so in every catarrhal epidemic Fever; for, by weakening the Powers of Nature, the Perspiration was too much checked, and from thence the acrid Colluvies increased.—Notwithstanding, some Bleeding in the Beginning of the Disorder, as to robust grown Persons, and those who lived luxuriously, and were plethoric, was always beneficial. Throughout the whole Course of this *Feveret* the Patients expectorated largely, which was a very great Relief to the Breast: However the Violence of the Cough very much exasperated the *Trachea* and the Lungs: It required therefore such Medicines as *Oil of Almonds*, *Sperma Ceti*, and something of the Poppy Kind, as *Diacodium*, *Tinct. Thebaic.* or *Elix. Paregtric.*; the last of which moreover excited easy and kindly Sweats, and at the same Time sat easy on the Breast. Frequently indeed the Load upon the Lungs, and the Oppression of the Præcordia, demanded *Oxymel scillitic.* *Lac. Ammoniac.* Syrup Croc. or something of that

that Kind. — In this Case nevertheless a gentle Emetic served instead of all ; which indeed, after Bleeding, very often presently removed every Thing, and was beneficial in all Respects.

The greater Part by far of the Sick had easy, equal, and kindly Sweats the second or third Day, which, together with a large Spitting which attended them, removed the Fever on the fifth Day, frequently even sooner ; in general however there remained after it a very great Loss of Strength.—Nothing however was more effectual in recovering this, than diluting, demulcent, and warm Liquors, such as very thin Milk, Barley or Oatmeal Whey, or a Decoc-tion of preserved Eryngo ; an Infusion of Ground-Ivy, Colt's-Foot, or Liquorice ; nay Coffee, with the Addition of a little sweet Milk, was very serviceable to Numbers.—Away however with your volatile Salts and Spirits, as they are called ; your hot Alexipharmacs, and all other Things of that Kind, which unquestionably very greatly disturb Nature, but are of exceeding little Service in expelling the Disease.—Indeed, if the Fever became more violent, and continued longer, I moderated it with a
* common saline Draught.

Frequently indeed, towards the End of this

* Consult the Month of *June*, 1740.

Feveret, several red, angry Pustules broke out, often likewise a sudden, nay, a profuse Diarrhœa, with violent Gripings, came on, there being a Translation of the morbid Matter upon the Intestines. — Hence probably arose several Dysenteries, which at this very Time were rise up and down here : I confess that they were mucous, and seldom bloody. — Nevertheless, so little was this Effort of Nature's to relieve herself to be restrained, that very often the Disease terminated by a Looseness ; and therefore it was to be encouraged by Manna, Rhubarb, Tartar solub. Tamarinds, &c. The stronger Purgatives however generally occasioned terrible Gripings, and intirely destroyed the Strength.

This Fever, altho' exceedingly common far and near, was fatal to few ; since, provided that the Sick kept within Doors in Season, when they were seized with it, it generally went off on the third or fourth Day. — Indeed this was a Matter more commonly requiring an accurate Course of Diet, and a proper Regimen, than a studied Heap of Medicines ; not but at some Times it required much more Care and Attention. Equal and moderate Sweats, plentiful Spitting, large Discharges of Urine, and that turbid, easily removed this Disorder. Frequently I was astonished at the vast Sediment which the Urine threw down, than which

5

there

there could not be a more favourable Symptom.

This Fever seemed to have been exactly the same with that which in this Spring was rife all over *Europe*, termed the *Influenza*: Nevertheless, it was much more destructive in the southerly Nations than it was here; nay, even in *London*, it increased very greatly the Number of Burials, rising them in one Week only to at least a Thousand.

M A Y.

New Moon the 12th. Full Moon the 27th.

The Atmosphere was very dry, clear, and warm, home to the 22d Instant; the Wind always north-easterly to the 17th, then south-easterly, and after the 20th came on a rainy south-westerly Wind.

Rain 16. 20. 22. 23. $\frac{1}{25}$. 26. $\frac{1}{27}$. 28. $\frac{1}{29}$.
 $\frac{1}{30}$. Dig. Dec.
 $\frac{1}{30} = 0.866$.

Thunder and Lightning at a Distance the 20th, p. m.—A slight Storm the 27th at Night, S. W. b S. 4_x.—Hail the 30th.—♂ and ♀ in close Conjunction the 6th, 11 p. m. so that they appeared as if they had been but one Planet.

Greatest

Greatest Height of	☿ 8, 30.1, N. E. 1.	} Mean Height
Least	21, 29.2, S. S. W. 2.	
Coldest Day	1, 36, a Calm.	} Mean Height 30 $\frac{1}{2}$ $\frac{3}{4}$.
Warmest	7, 22, N. N. E. 1.	

Several were seized with Apoplexies, and a great many Persons carried off in them, not only here, but also in other Places : Might not this be owing to the excessive and unseasonable Warmth's rarefying the Blood too greatly all of a sudden ? Quotidian and tertian Fevers very rife far and near ; the Small-pox and Measles up and down.—The * Hooping-Cough was common, and very obstinate, and, when it succeeded the Measles, often fatal. — The most effectual Method of overcoming this was by moderate Bleeding and gentle Purges, Country Air, frequent Riding-out, and a regular, easy Diet : Where those proved unsuccessful, Medicines prepared with Quicksilver and Cort. Peruvian. seldom failed ; for these dissolved the Lensor of the Blood, and brought off the Worms, which had for a long Time been exceeding troublesome to Numbers ; nor in general did the Cough cease until those Worms were discharged.—Frequently the Cold-Bath proved of signal Service, when every Thing else was ineffectual ; nevertheless great Care was to be taken that the Patient had no feverish Disposition upon them, or Spitting of Blood.

* See what I have said about the Children's Cough, Vol. I.

A bloody or a mucous Dysentery prevailed very much in *Plympton*, and the Neighbourhood: Several voided Worms, altho' they were not much relieved from thence; nay, frequently, they very soon after were seized with a cold Sweat, and presently expired. It is my Opinion, that a *gangrenous* Sanies expelled those filthy Inhabitants; since, together with these, were discharged livid, and exceeding foetid little Pieces of Flesh; a certain Sign of a Mortification in the † Bowels.

Bleeding, which I advised in the preceding Month, I found to be more necessary now, immediately, even in the Beginning of the Disease, upon the Account of the excessive and uncommon Heat of the Season; for from hence the Blood, being very greatly rarefied, became turgid, and occasioned the greater Inflammation. — Indeed there is scarce an Instance of an *epidemic* Dysentery, where the Intestines are not in some Measure inflamed. Where, however, the Inflammation increases, there it is very right always to let Blood as soon as possible, the Quantity of which is to be regulated by the Strength, Age, Pulse, and the Constitution both of the Time of Year and also the Patient himself. — A gentle Purge is then to be given (the Ventricle being first of all washed out, if

† Ἡ ἐπὶ Δυστηρίας ἐχούμεναι αἷον, Σάκης ἐποχυσήσῃσι Σανδ-
σμάσι. Hippocrat. Aph. 26, Sect. 4.

a Nausea and an Inclination to puke requires it;) nevertheless mild Purgatives are always to be had Recourse to, since those which are made up of Aloes, Scammony, Coloquintida, are absolutely a Poison, and not a Remedy. — Indeed the best Remedy of all is Rhubarb, which is to be given very often (and that always torrefied, if it comes from the *East-Indies*) with a little Nutmeg or Cinnamon. — The Tincture of this in Spirit of Wine, as too resinous, is but of little Service, and that whereof an Extract is made upon red Wine is far preferable.

What therefore? Are we to purge or not, if the Stools are bloody and very thin? Yes; since the acrid Colluvies of the Intestines by long Continuance becomes still more acrid, and therefore irritates so much the more; from whence arises so much the greater Inflammation, and the Disease itself is consequently so much the more increased. — But what if the Stools are tinged with Blood? Be it so: Does a moderate Spitting of Blood prove prejudicial, or not, in an Inflammation of the Lungs? Does not this very often, under certain Circumstances, remove the Disorder? If the small Branches of either the *mesenteric* or *celiac* Artery, creeping over the Tunics of the Intestines, are obstructed, a Resolution and a Concoction carrying on, the obstructing Matter is
very

very frequently discharged into the Cavity of the Intestines : Now does this prove dangerous to the Patient, or does it relieve him ?—If therefore the Stools are only moderately bloody, I am under no Apprehensions.—I wash off the irritating Acrimony with a mild laxative Draught ; nay, I gently purge off the corrupted Colluvies itself, which would otherwise occasion an Exulceration of the Intestines, and at length a Mortification, the certain Symptoms of which are black, oily, and very fœtid Stools, with some livid Bits of Flesh, cold Sweats, Singultus, and a Delirium. I have moreover taken Notice of something very singular in this Case, and which was always a fatal Symptom, namely, very limpid Urine, but that very sparing ; and this more especially in a very worthy Clergyman of this Town, who was at first seized with a Nausea, a Vomiting, with painful and very bloody Stools, attended with a slight Fever, dry Tongue, and whose Urine was almost quite black : On the fifth Day every Thing seemed to be more easy, but on the sixth the Pains returned all again, black, sanious Stools, with Clots of Blood resembling Flesh, of a most dreadful Stench, very little Urine, but made often, intirely limpid notwithstanding his taking Rhubarb daily : Instantly there came on a Singultus, a small Delirium, a very considerable

rable Drowfiness, and at length, about the ninth Day, Death itself, the Remedy of all Evils.

In this particular Case, the Intestines seemed to have been so very far mortified, as to have transmitted nothing at all into the Blood.

There is no Disease in which a diluting and demulcent Kind of Liquor is more necessary than in a Dyfentery. — In this indeed pure Spring-Water did not prove a little serviceable to those poor People, who had Recourse to some sacred Fountain, with Submission to the Gods, and *anti-dysenteric*. — This Water was at least very innocent, and pure, and much more deserved the Name of *Aqua Vitæ*, than that inflammatory Spirit of Wine celebrated under this Title, which the common People so frequently prejudice themselves with in this Disease. Nay, even * *Celsus* himself recommends the Drinking cold Water, if the Disorder is of long Standing : But I advise, in the Beginning, Water that hath had the Cold taken off, since it serves by that Means to wash out the Intestines much better, and passes more easily thro' the mesaraic and lacteal Vessels to the Dilution of the Blood ; however, when the acrid Colluvies of the Bowels is washed away, then indeed they are to be strengthened, and therefore at this Time it is not unadvisedly given. — I have

* *Celsus*, Lib. 4, C. 15.

with this alone, and the Addition of a little Opium, after that the Intestines had beforehand been well cleansed, sometimes completed the Cure of a Dysentery. — I by no Means approve of oily, glutinous Medicines; if any Thing of this Sort should be required, from the Intestines being deraded, and deprived of their natural Mucus, give *Decoct. Alb. Emul. Amygdal.* with *Gum. Arabic.* and *Mucilag. sem. Cydonior.* In the common Food let them make use also of Gelatin. C. C. with Ichthyocol. Sallap, Panado, or other Things of this Kind.

So much however by the Bye, in Regard to the Dysentery; — we are now to observe the Stages of the epidemic Fever. — This Disorder indeed now raged greatly every-where, and at this Time had frequently a good deal of the Nature of a Peripneumony in it; sometimes also it approached very much to that of a putrid; the Blood which was drawn in either Case appeared to be very little fizy, altho', at the same Time, there was a very great Oppression upon the Breast. — A great Hoarseness also, and sometimes a Quinsy itself, attended this Fever. — At the State of the Disease a great Number of angry Pustules broke out, which were always beneficial, and were always followed by a very great Desquamation of the Cuticle: A Diarrhœa was now much more uncommon, and, if it did happen to come on,

much milder ; for the warm Season now drew out the Humours to the external Parts, and therefore the greater Part of the Sick were soon cured by a kindly, universal Sweat's coming on ; but a great many however were seized with a Kind of an * intermittent Fever.—It was certain, that quotidian and tertian Fevers were now rife every - where ; nevertheless, in the Conclusion of the Month, the catarrhal, epidemic Fever almost intirely went off.

J U N E.

New Moon the 11th. Full Moon the 25th.

This Month also was dry, and in general very warm ; and yet, in the Middle of it, there were two or three very cold Days. The Wind was frequently north-easterly, sometimes easterly, seldom southerly, and sometimes it was quite hushed. At the End of the Month there were exceeding great Dews.—There was a surprising Hoar-Frost, nay, even Ice itself, on the 13th early in the Morning, and that over all *England*.

Rain 3. 5. $\frac{1}{10}$. 12. 13. $\frac{11}{14}$. 15. 17. 26.—
Hail the 13th, at Noon, with Thunder and
Dig. Dec.
Lightning. = 0.838.

* See the *Essay on Fevers*, Page 20.

Storm, Thunder, and Lightning the 14th at Night. — Lightning and Thunder early in the Morning the 26th. — A small *A. B.* the 28th at Night, N. 1.

Greatest Height of ☿	6, 29.8, N. b E. 1.	} Mean Height
Least	3, 29.3, S. 1.	
		29.6 $\frac{1}{2}$.
Coldest Day	13, 46, N. b E. 1.	} Mean Height 23.
Warmest	7, 20, E. 2.	

The Small-pox and Measles still, and a Number of convulsive Coughs: Putrid and peripneumonic Fevers up and down: Intermittents, Tertians, were particularly * epidemic: Very many People were troubled with Coughs, Swellings, and Hoarsenesses.

J U L Y.

New Moon the 10th. Full Moon the 25th.

There now succeeded a cold *July*, and therefore that which generally happens, a rainy. Oftentimes a turbulent south-west Wind blew, not uncommonly a south-east; by which Means the Atmosphere was rendered very thick and humid.

Rain	$\frac{''}{1}$.	$\frac{''}{4}$.	$\frac{''}{5}$.	$\frac{''}{6}$.	$\frac{''}{7}$.	$\frac{''}{8}$.	$\frac{'}{9}$.	$\frac{'''}{10}$.	$\frac{'}{11}$.	$\frac{'}{15}$.	$\frac{'}{17}$.	
		$\frac{'}{20}$.	$\frac{'}{21}$.		$\frac{''}{23}$.						Dig. Dec.	
18 —	20.	21.	22.	23.	25.	30.	31.	= 2.866.				

* See *Essay on Fevers*, Page 21.

Greatest Height of ☿	29, 29.8, N.W. b W. 1.	} Mean Height
Least	7, 29.0, S. W. 3x.	
Coldest Day	10, 38, S. E. b E. 2.	} Mean Height 32 $\frac{1}{2}$.
Warmest	21, 25, S. W. 1x.	

The Small-pox still scattered here and there : Several intermitting Fevers, but chiefly * tertian : Otherwise very few Disorders.

Probably a cold and thick Constitution of the Atmosphere, in the preceding Winter and Spring, had heaped up together a great deal of serous Lensor, which, according to People's different Constitutions, at one Time brought on an intermittent, at another a *catarrhal*, and at other Times a putrid Fever.

AUGUST.

New Moon the 8th. Full Moon the 24th.

Thanks be to God ! *August* appeared by far more auspicious, and produced a favourable Harvest. The Season was frequently very warm ; but, while the Dog-Star burned up the Fields, the Herbage was nourished by a very plentiful Dew. The Wind was generally easterly, but sometimes inclining to the North ; it was seldom south-west, and often it was a Calm.

Rain $\frac{1}{1}$. 2. $\frac{11}{5}$. 6. 15. 19. 20. 29. 30.
 Dig Dec.
 — 0.700.

* *Essay on Fevers*, Page 21.

Thunder, Lightning, and a most heavy Rain at *Launceston* the 17th, p. m. — We had here also Thunder, Lightning, and Rain the 29th at Night.

Greatest Height of ☿	23, 29.9, N. N. E. 1.	} Mean Height
Least	5, 29.3, S. W. 2 ^x .	
Coldest Day	29, 34, E. S. E. 2 ^x .	} Mean Height 27 $\frac{6}{13}$.
Warmest	9, 19, E. 1.	

The Small-pox and Measles here and there ; Several intermitting Fevers in the Country : Some Apoplexies and Fluxes : Very few were sick.

S E P T E M B E R.

New Moon the 7th. Full Moon the 22d.

The very beautiful and dry Season, and at the same Time a most * healthy one, still continued. The Springs and Rivulets were almost quite dry ; but an immense Quantity of Dew fell every Day. The Wind was almost constantly easterly, a north-easterly Wind nevertheless intervening sometimes, very seldom a southerly.

Dig. Dec.

Rain 2. 5. 6. 8. 16. 17. = 0.250.

Greatest Height of ☿	24, 30.0, E. N. E. 1.	} Mean Height
Least	5, 29.6, S. 1.	
Coldest Day	30, 48, N. E. 1.	} Mean Height 36.
Warmest	19, 30, E. b N. 1.	

* ———— οἱ ἀνθυμὸι τῶν ἐπομβριῶν ἐστὶν ὑγιεινίστοι. Aph.
15, Sect. 3.

In the Beginning of this Month not a few People were seized with an anginose Fever, which, like a Peripneumony, attacked the Lungs, and that frequently with imminent Danger to the Sick. The Asthma rise; the Itch every-where; otherwise very few Disorders.

O C T O B E R.

New Moon the 6th. Full Moon the 22d.

A rainy Season now came on, and the Winter approached with hasty Strides; hence the Atmosphere became thick and moist. In the Beginning of the Month a north-west Wind prevailed, then a south-east, and soon after a stormy south Wind.

Rain $\frac{1}{3}$. $\frac{1}{4}$. $\frac{1}{6}$. 7—9. 15—17. $\frac{1}{18}$. $\frac{1}{20}$. 21.
 $\frac{1}{22}$. $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{25}$. 26. $\frac{1}{27}$. 29. $\frac{1}{31}$. = 3.658.
 Dig. Dec.

A slight Storm the 16th, S. E. b S. 4_x. —
 The 23d, in the Evening, S. S. W. 4_x. — A
 violent one the 23d, at Midnight, S. E. b S. 4_x.
 — A very great one also all Day the 25th, S. 4.
 — A very large and yellowish Halo about the
 Moon the 19th, H. 8, p. m.

Greatest Height of	8 1, 30.0, N. 1. }	Mean Height
Least	25, 29.0, S. 4. }	29.5 $\frac{16}{28}$.
Coldest Day	14, 55, N. E. 1. }	Mean Height 44 $\frac{15}{28}$.
Warmest	27, 39, a Calm. }	

There

There was a Kind of a *sporadical* Fever, which terribly affected the Fauces and Lungs : Coughs, and Pains, and Swellings in the Fauces, very common : Violent Rheumatisms up and down.

N O V E M B E R.

New Moon the 5th. Full Moon the 20th.

In the Beginning of *November* the Wind was generally north-westerly ; in the Middle of it north-easterly ; but, from the 19th, one Time south-westerly, at another southerly ; nevertheless the Barometer continued to be high ; but the Atmosphere was dense and warm.

Rain $\frac{''' }{1}$. $\frac{' }{2}$. $\frac{' }{3}$. $\frac{' }{4}$. $\frac{'' }{5}$. $\frac{'' }{6}$. 11. 16. $\frac{'' }{17}$. 18. $\frac{'' }{19}$.
 20. $\frac{'' }{25}$. $\frac{' }{28}$. $\frac{' }{29}$. = 2.512. Dig. Dec.

Thunder and Lightning the 2d, H. 4, a. m.
 —An Hoar-Frost and Ice the 9th.—The 14th, N. E. 1^x.

Greatest Height of ☿ 24, 30.2, S. b E. 1. } Mean Height
 Least ————— 18, 29.4, S. W. b W. 3. } 29.9.
 Coldest Day 14, 62, N. E. 1^x. } Mean Height 49 $\frac{25}{8}$.
 Warmest 6, 42, W. S. W. 2. }

A very mild Season, and few Disorders ; there were nevertheless some anginosæ, scarlet, and pustulary Fevers : Coughs also common.

D E C E M B E R.

New Moon the 5th. Full Moon the 20th.

From the 1st to the 7th of *December* we had an easterly Wind, afterwards a north-west or south-west, sometimes also a north-east; from the 24th to the End the Wind was continually easterly, and often very cold; the Station of the Barometer was in general very high.

Rain 1. 8. $\frac{''}{9}$. $\frac{'}{14}$. $\frac{'}{15}$. $\frac{'}{16}$. $\frac{'''}{17}$. $\frac{'}{18}$. 19. —

Dig. Dec.

Hail 14. = 1.514.

Great Hoar-Frosts very often this Month; a severe Ice also.

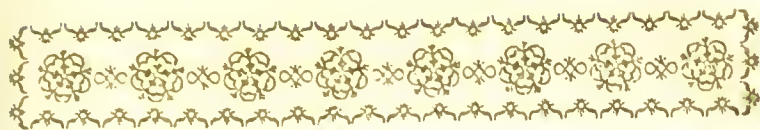
Greatest Height of 8 21, 30.6, N. E. 1. } Mean Height
Least ——— 17, 29.1, S. W. 2. } 30.0. $\frac{1}{29}$.

Coldest Day 31, 73, E. N. E. 2^x. } Mean Height 59 $\frac{2}{29}$.
Warmest 8, 46, S. W. 3^x. }

The Season was yet exceeding healthy, and Disorders much more uncommon than usual: Coughs frequent, and even a great Number of convulsive ones amongst Children: Some Pleurifies, Quinsseys, and Rheumatisms up and down.

The whole Quantity of Rain, for the Year
Dig. Dec.

1743, = 20.908.



O F T H E

A I R,

A N D

E P I D E M I C D I S E A S E S,

For the Y E A R 1744.

J A N U A R Y.

New Moon the 3d. Full Moon the 18th.

THE Wind being easterly, almost during the whole Month, kept the Mercury in the Barometer very high; but, inclining generally to the North, it rendered the Atmosphere very dry and cold, and hence there was oftentimes a very severe Frost; nay, on the 28th and 29th the Sea itself, near the Shores, was frozen.

Rain $\frac{''' }{7}$. $\frac{' }{11}$. $\frac{' }{15}$. 30. — Snow 27. = 1.068. Dig. Dec.

Greatest Height of ☿ 18, 30.6, E. N. E. 1. } Mean Height
Least ——— 7, 29.6, S. 2. } 30.0 $\frac{1}{3}$.

Coldest Day 29, 76, N. E. 1. } Mean Height 64 $\frac{1}{3}$.
Warmest 11, 56, S. b E. 2. }

Almost

Almost every body was seized with a violent and troublesome Cough : Most severe Paroxysms of the Asthma, Pains in the Teeth, Hoarseness, and Sore-Throats, plagued Numbers: A Pleurisy or Peripneumony seized Numbers also, and some an Ophthalmy.—There was a Hooping-Cough very epidemic amongst the Children, to the Subduing of which Bleeding was more necessary than I ever remembered, and that even among very young Children, whose Blood was generally covered over with a thick Size. The Decoction of the Cort. Peruvian. also did not prove so effectual in this Case, which always happens, where the Blood is very thick and tenacious, and subject to an Inflammation; upon which Account it is very improperly given to People in Pleurisies and Peripneumonies.

F E B R U A R Y.

New Moon the 2d. Full Moon the 16th.

Both the Weather and the Wind was variable this Month; but, blowing generally from the East, it kept the Barometer very high. In the Beginning of the Month there was now and then a Calm, and during the Whole of it the Atmosphere was dense, and often cold; nevertheless there was but little Frost.

Rain

Rain $\frac{1}{7}$. $\frac{1}{8}$. 9. 11. 17. $\frac{11}{19}$. $\frac{11}{20}$. 21 — 23.

$\frac{1}{4}$. 26. 28. 29. — Hail the 9th, N. b W. 1^x.

Dig. Dec.

— The 24th, N. W. 3. = 1.722.

A violent *Circius* the 24th, p. m. — An exceeding violent one the 28th at Night. — The 29th, a. m. — A very great and bright Halo about the Moon the 18th.

Greatest Height of	☿ 13, 30.3, E. S. E. 2.	} Mean Height
Least	29, 29.2, N. W. b W. 4.	

Colest Day	6, 67, E. 2.	} Mean Height 56 $\frac{15}{27}$.
Warmest	23, 49, W. S. W. 2 ^x .	

Some Small-pox, a scarlet miliary Eruption with a slight Fever, and also *rheumatic* Fevers here and there. — Almost every one was troubled with a violent Cough, which in several was altogether of the *catarrhal* Kind, nevertheless in a great many it was asthmatic; hence came on frequently a Peripneumony, and not uncommonly a Spitting of Blood, which indeed threw some Persons into a pulmonary Consumption. — The Hooping-Cough attacked even some grown Persons; the only Method of relieving whom was by repeated Bleeding and a gentle Emetic.

MARCH.

M A R C H.

New Moon the 3d. Full Moon the 17th.

There fell a great deal of Hail in the Beginning of *March*, the Wind being often north-westerly. From the 12th to the 23d the Wind stood between the East and the North, and, after that it was South-west. Towards the very End it was north-easterly. The Atmosphere was generally dry and cold.

Rain $\frac{''' }{1}$. 2. $\frac{' }{3}$. 4. $\frac{'' }{5}$. 6. $\frac{' }{7}$. $\frac{'' }{9}$. 11. 23. 25.
 $\frac{' }{26}$. $\frac{'' }{27}$. 28. 30. — Hail 2. 3. 6. 7. 8. $\frac{' }{10}$.
 — Snow 8. $\frac{' }{31}$. $\overset{\text{Dig. Dec.}}{=} 2.632$.

A Storm the 2d, N. W. b W. 4_x . — The 5th, S. W. b W. 4. — The 11th, N. W. b N. 4_x . — A very bright northern Light the 22d, H. 9, p. m. E. N. E. 2_x .

Greatest Height of ☽ 15, 30.1, E. N. E. 2. } Mean Height
 Least ————— 5, 29.2. } 29.5 $\frac{2}{3}$.
 Coldest Day 14, 62, N. N. E. 2. }
 Warmest 28, 46, W. S. W. 2. } Mean Height 55 $\frac{26}{100}$.

Some tertian and semi-tertian Fevers: An obstinate and very troublesome Cough everywhere, which often caused an Eruption of Blood from the Nostrils, and frequently from the Lungs; sometimes it was attended with a Peripneumony.—This brought on upon several a
 Consumption,

Consumption, especially upon such as had been before asthmatical. The Pleurisy and Rheumatism here and there; at the Close of the Month Pleuro-peripneumonies were very common.—The Blood which was drawn was very thick, and covered over with a very tenacious and yellow Size.

A P R I L.

New Moon the 1st. Full Moon the 15th:

In the Beginning of this Month there was a great Quantity of Snow and Hail, the Wind being north-easterly; presently came on a dirty southerly. From the 12th to the 16th it blew easterly, and then again north-easterly; but, towards the End, north-westerly. The Air was often very cold: Very great Hoar-Frosts very common in the Middle of the Month, nay, and sometimes Ice.

Rain $\frac{1}{1}$. $\frac{''''}{4}$. 6. $\frac{'''}{7}$. 8. $\frac{1}{9}$. $\frac{''}{10}$. $\frac{'''}{12}$. $\frac{''}{15}$. 22. $\frac{''}{28}$.

30. — Snow and Hail 1. $\frac{1}{2}$. 3. 4. 9. 26.

Dig. Dec.

= 3.390.

A Storm the 7th, p. m. S. 4x.—Ice the 14th and 15th.

Greatest Height of $\frac{8}{19}$, 30.1, N. N. E. 1. } Mean Height
Least ————— 5, 29 0, S. S. W. 3x. } 29.6 $\frac{3}{29}$.

Coldest Day 3, 65, N. N. E. 3. } Mean Height 50 $\frac{6}{29}$.
Warmest 24, 41, N. W. b W. 1. }

Pleurifies

Pleurifies and Peripneumonies very common, and frequently they raged united together. Several People were troubled with an Asthma, several with a Rheumatism, others with a bastard Pleurisy, and a very considerable Number with a very violent Cough. The Measles up and down; a great Number of Small-pox in the Neighbourhood, and in the hither Parts of *Cornwall*.—Not a few * tertian Fevers.—A Paraphrenitis more frequent than usual.

I scarce ever observed the Blood drawn from the Sick more dense and sily than at this Time, and that frequently after a fourth, nay a sixth Bleeding.—This indeed I particularly took Notice of in the first Surgeon of the Navy-Hospital, who, in the Beginning of the Month, was carried off in a Paraphrenitis.

This good and ingenious Man was taken with a Shaking the 3d of *April* in the Morning, and, whilst he was visiting the Sick, being instantly seized with a very violent Shuddering, he went home, where being immediately pierced through with a most acute Pain in the Back, and the lower Part of his right Breast, he took to his Bed, and fell into a most violent Fever.—There was immediately drawn from him $\frac{3}{4}$ xvi of Blood, after which he chose to send for me.—I ordered an emollient Fomentation, and a laxative Ene-ma, and also a good deal of Nitre and Sperma

* See the *Essay on Fevers*, Page 20.

Ceti, and, besides, the Drinking freely of some warm diluting Liquor: The Pain raging still violently, I at Night ordered him to be again bled, to ℥xvi more, the Fomentation again, and an Enema of sweet Milk, with a good deal of Sea-Salt, which gave him two or three Stools: He then took an ℥fs of Diacodium, and 24 Drops of Tinct. Thebaic. — He made a Noise all Night, had a very difficult Respiration, and, being tormented with a dry, little Cough, expectorated nothing at all. — On the fourth Day I visited him early in the Morning, and there were taken from him ℥xiv of Blood; emollient Fomentations and Cataplasms were also applied, and soon after an emollient Enema thrown up; which being again rejected, he took an anodyne Draught: By this every Thing was quieted for some Hours, and in the Evening he slept. — A treacherous Truce this however! He passed the Night in the greatest Uneasiness: The Fever ran very high, the Breathing short, interrupted, and very difficult, the Pain exceeding acute, vast Thirst, and Tongue dry. — On the 5th of *April* therefore, H. 9, a. m. Bleeding was repeated to at least ℥xii ; besides, he took ℥x of *Manna*, with an ℥fs of *Sal. Mirabil. Glauber.* in Water-Gruel: This occasioned three or four Stools; nevertheless the Pain was still very violent, the Pulse exceeding quick, but slender, and yet very tense: The Anodynes

were twice repeated that Night, which procured some Sleep, but that very disturbed.—When I found that every Thing proved ineffectual, I ordered Camphire, with Nitre, &c. and the saline Draughts, with Sal. C. C. the Juice of Lemons, &c. to be given, in order that I might remove the Disorder by Sweating : I moreover directed Blisters to be applied to the Thighs and the Back. — My Patient had a small, unequal Sweat, but presently came on a Shivering, and a vast Pain in the Back and Side ; so that he now not only made a great Outcry, but was also quite mad. — Therefore a fifth Time, namely, on the 6th Day in the Afternoon, he was blooded again to about $\frac{3}{4}$ xv. After this we had Recourse to Fomentations, Clysters, and Anodynes, which produced some Sleep ; but then a vast Languor and Sleep came on. — After six or eight Hours he grew very cold, and fell into a Shivering, made a Noise, and was quite delirious, crying out that he was tormented with Flames and Swords in his right Side ; (I, to my great Sorrow, perceived the * Hypochondrium to be very hard, but drawn back ;) in the mean Time he drew his Breath with the utmost Effort, as if he had been running with the greatest Speed, but at the same Time with the utmost Anguish, and as if stabbed with a Sword ;

* Si Septum transversum percussum est, Præcordia fursum contrahuntur. *Cels. Lib. 5, C. 26.*

he painfully laboured to utter a Sigh.—Being intirely at a Loss what I should do, I advised a sixth Bleeding, to about $\frac{3}{4}$ xii, and repeated the *Cataplasms* and *Anodynes*.—An Heaviness, Tremor, Twitching of the Tendons, and Singultus, came on ; however he declared himself to be relieved : He lay in general pretty quiet, but at the same Time muttering some strange, incoherent Stuff.—A coldish Sweat seized his Forehead ; whilst his Cheeks burned with a most violent Scarlet, his Nails became livid, and his Hands cold ; he nevertheless moved more easily, nay, he raised himself up in the Bed of his own Accord, imagining himself to be much better, if the great Difficulty of Breathing, and the great Pain of his Side, which he had always, was removed.—As to myself, however, I plainly perceived that he was a dying Man, the Septum Transversum being mortified ; notwithstanding, between Dosing, Singultus, and a Delirium, he spun out the Night ; and on the 7th of the Month, a little before Noon, this Person, deserving of a longer Life, if any one could be so, expired. — Immediately after his Decease, the whole right Side, as far as even the *Os Ilium*, was quite livid, and looked as if it had been from a Contusion. This Case was evidently *paraphrenitic* *, Accounts of which

* *Essay on Fevers*, Page 240.

are rarely met with in medical Writers; altho' I am of Opinion, that they much oftener happen than is commonly thought.

There were drawn from this Person, within the Space of four Days, almost an hundred Ounces of Blood, of which each Portion was exceedingly sizzly, nay, the very last, altho' the Crassamentum (like some small globular Island, which was almost quite under Water) floated in a great deal of very thin Lymph, and was covered over with so strong a Buff, that you could scarce penetrate it with a * Pen-knife.

M A Y.

New Moon the 1st. Full Moon the 15th.

New Moon the 30th.

An easterly Wind prevailed during this Month; but from the 19th to the 24th it blew westerly. The Air was very dry, and towards the End very warm. — The Season in general was very mild.

Rain $\frac{''}{3}$. 8. $\frac{'}{10}$. 11. 12. $\frac{''}{13}$. 18. 21. $\frac{'}{22}$. —

Dig. Dec.

Hail 13. = 1.236.

Thunder and Lightning the 3d, at Night.

Greatest Height of ☽	15, 30.1, E. N. E. 1.	} Mean Height
Least	22, 29.2, S. W. 3.	
		29.6 $\frac{26}{28}$.

Coldest Day	14, 47, E. N. E. 2.	} Mean Height
Warmest	30, 20, E. N. E. 1.	
		36 $\frac{6}{29}$.

* *Essay on Fevers*, Page 188.

Intermittent

ripneumonies, and some Anginas: The Small-pox epidemical, and sometimes very malignant, as being sometimes attended with *Petechiæ* and an *Hæmorrhage*.

J U L Y.

Full Moon the 13th. New Moon the 28th.

In the Beginning of this Month there was a good deal of Rain, but little afterwards: The Atmosphere was generally dense, and the Wind variable; sometimes a Calm.—From the 16th to the 22d the Wind blew easterly.

Rain $\frac{1}{1}$. $\frac{1}{2}$. $\frac{1}{3}$. 4. 6. $\frac{1}{8}$. 9. $\frac{1}{10}$. $\frac{11}{22}$. 24. 30.

Dig. Dec.

= 1.324.

A small Storm the 3d, p. m. S.W. b W. 4x.

Greatest Height of ☿ 7, 30.0, N.N.W. 1. } Mean Height
Least ——— 3, 29.2. } 29.6 $\frac{26}{29}$.

Coldest Day 4, 36, W.N.W. 1. } Mean Height 29 $\frac{4}{29}$.
Warmest 20, 22, E. 1x.

The Small-pox, which were now epidemical, were not a little fatal, being often small, black, and pitted in the Middle of the Pustules with a livid or black little Trench. — Sometimes they discharged a crude Ichor, which eat away the Flesh under it, and even occasioned a Gangrene. — The Tongue and Fauces, at the Decline of the Disease, were very foul, and frequently exceedingly rough and black; to which was very often

often added a profuse Diarrhœa; and sometimes the Tragedy concluded in the Manner of a Peripneumony. — The Sick however expectorated very largely, especially in the Beginning of the Disease. If any Kind of Medicines were of Service, in these malignant Small-pox, they were the rough *Alexipharmacs*, with a good deal of * acid in them; I very frequently made use of the *Alexipharmac Tincture* of the *Bark*, with a considerable Quantity of Elix. or Spirit. Vitriol.; frequently *French Claret*, with the Addition of those Acids, especially at the Decline of the Fever: In the mean Time I prescribe plentiful Dilution, and acidulated, with a demulcent and proper Kind of Diet. These Things sometimes are of very great Service; but, in general, grim Death was the constant Attendant of the black Small-pox.

When, upon the Coming-on of the Disease, the Small-pox appear livid, or too little acuminated, and the Fever comes on too slowly, some generous Cardiac Medicines are then to be given, and Blisters moreover ought to be applied, notwithstanding all that *Sydenham*, and his Followers, (among whom I myself am so in a great many Things) say against it. In such a Case *Crocus*, and *Pulv. Contrayerv. C. Moschus*, and *Theriaca Androm.* nay, some sweet Wine,

* *Essay on Fevers*, (Chapter of the Small-pox) Page 151.

are seasonable. — Musk has a most amazing Power of driving out the Small-pox thro' the Skin, at the same Time it does not heat too much. If the Pustules are crude, or altogether watery, I give some Myrrh, which is very effectual in the Maturation of them. — When however the Blood-vessels are turgid, the Fever runs very high, and every Thing is in an highly inflammatory State, to administer Things of this Kind would be acting not like a prudent but a mad Physician, who devoted his Patients to the Grave : — I wish that I had never seen any Thing of this Kind. Upon the Whole, therefore, no Medicine whatever is always to be given in this Disease, or indeed in any other.

AUGUST.

Full Moon the 12th. New Moon the 26th.

In the Beginning of *August* the Weather was very favourable, but, from the 11th home to the End, it was generally rainy, and cold, the Wind changing now and then. In the Beginning of the Month great Dews fell.

Rain 1. 3. 11 — 14. 15. 16. ^{///} 17. 19. 22. 23.
^{///} Dig. Dec.
 25. 26. 27. 29. 31. = 2.074.

A Storm the 17th, at Night, S. W. 4. — The 28th, W. S. W. 4x. — The 31st, early in the Morning,

Morning, S. W. 4. — Thunder and Lightning the 13th in the Evening.

Greatest Height of ☿ 4, 30 0, N. W. b W. 1. } Mean Height
Least ————— 18, 29.1, S. W. 3^x. } 29.6 $\frac{8}{29}$.

Coldest Day 30, 41, N. W. 2. }
Warmest 5, 25, N. W. b W. 1. } Mean Height 31 $\frac{28}{29}$.

A great many Small-pox : Intermitting Fevers here and there : Coughs common towards the End of the Month : Some Quinseys : Very few Funerals, excepting such as died in the Small-pox.

S E P T E M B E R.

Full Moon the 10th. New Moon the 25th.

This Month was very cold and wet, the south-west Wind raging frequently. From the 17th to the 24th there was a furious south-easterly Wind, which kept the Barometer low ; but the Tides were very high and irregular.—The 26th there was a violent Storm in the Morning, E. S. E. 4_x. At Noon S. S. E. 4, in the Evening, S. S. W. 4^x, which occasioned prodigious large Waves to roll in, and an exceeding high Tide, which overflowed all the Shores far and near ; indeed it was by far much greater than had ever been seen here before *.

	$\frac{1}{1}$		$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$
Rain	1.	3.	4.	5.	6.	7.	9.	10.	11.	12.	13.	15.			
	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$
	17.	18.	20.	21.	24.	26.	27.	30.	=	4.	470.				

* See Vol. I, Page 18.

A very large Halo about the Moon the 8th,
H. 8. p. m.

Greatest Height of ☉ 2, 29.9, W. N. W. 2. } Mean Height
Least ——— 26, 28.9. } 29.3 $\frac{4}{9}$.

Coldest Day 30, 48, N. W. 1. } Mean Height 39 $\frac{1}{2}$.
Warmest 9, 34, S. S. W. 3. }

A great many Small-pox, however they were now somewhat milder : The Measles up and down ; Undoubtedly there were but few Disorders in this Place ; nevertheless some Persons were plagued with the Colic, the Rheumatism, and a Cough ; a great many with Fluxes.

OCTOBER.

Full Moon the 9th. New Moon the 23d.

The Weather was very stormy and dirty this Month ; almost incessant Rain, and vast Deluges every-where. A south-westerly Wind raged very often, but frequently there intervened a north-west ; not uncommonly also a south-east, and on the 12th and 13th a cold north-east.

Rain $\frac{1}{1}$. $\frac{1}{2}$. $\frac{1}{3}$. $\frac{1}{4}$. $\frac{1}{5}$. $\frac{1}{6}$. $\frac{1}{8}$. $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{14}$. $\frac{1}{15}$.
 $\frac{1}{19}$. $\frac{1}{20}$. $\frac{1}{21}$. $\frac{1}{22}$. $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{25}$. $\frac{1}{28}$. $\frac{1}{30}$. $\frac{1}{31}$.
Dig. Dec.
= 5.608.

A slight Storm the 2d, S. W. 4_x. — A very violent one the 3d at Night, W. S. W. 4_x. — The 4th, a. m. W. b N. 4. — The 8th in the Evening,

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Epidemic Diseases.

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Evening, S. W. 4_x.—The 9th, S. W. 4.—The 22d, early in the Morning, W. S. W. 4_x.—Thunder and Lightning the 3d at Night.—Inceffant Thunder and Lightning at Night the 22d, S. W. 4.—A very high Tide the 9th.

Greatest Height of	8	13, 30.2, N.E. 1.	} Mean Height
Least	—	4, 28.6.	

29 4 $\frac{2}{3}$.

Coldest Day 13, 60, Frost.

Warmest	19, 42, S. W. b W. 3.	} Mean Height 48.
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The Small-pox here and there : Gripings and Fluxes seized Numbers, which I believe was for the chief Part owing to the Drinking of new-made Cyder.—For the Apples, upon Account of the great Wet, very soon grow putrid, and hence are more apt to occasion a Diarrhœa, than if they were firmer, and contained a more generous Juice.—Violent Coughs, and very common, and from hence arose sometimes a Peripneumony, or a Pleurisy ;—bastard Peripneumonies also were not uncommon. Some putrid Fevers : In general however acute Disorders were much fewer than any one would imagine, considering the unfavourable Season. Probably the frequent Storms dissipated the noxious and sickly Congestions of the Atmosphere, in the same Manner as the violent Agitation of the Ocean prevents the Putrescence of the Sea.

NOVEM.

N O V E M B E R.

Full Moon the 9th. New Moon the 23d.

In the Beginning of this Month we had a rainy, and sometimes a stormy Season. The Wind was frequently north-west, not uncommonly south-west; from the 10th to the 21st north-east; now and then a Calm, then a tempestuous south-west Wind to the 25th; afterwards a north-east, and fair sun-shine Weather.

Rain 1. ^{///} 2. ^{///} 3. [/] 4. 5. 6. ^{///} 7. [/] 8. ^{///} 9. 11. 13.
[/] 16. ^{///} 22. [/] 23. 24. [/] 25. — Snow and Hail 9. [/] 17.

————— Dig. Dec.
 ————— Sleet the 20th at Night. = 3.740.

A Storm the 2d, at Noon, S. W. 4_x. — The 6th, at Night, S. W. 4_x. — The 22d ditto, S. b W. 4. — A violent Wind Circius the 17th. — A smart Frost from the 17th to the 21st.

Greatest Height of ☿ 29, 30.5, E. N. E. 1. } Mean Height
 Least ————— 23, 28.7, S. b W. 3_x. } 29.7 $\frac{6}{28}$.

Coldest Day 20, 69, N. b E. 1. } Mean Height 56 $\frac{1}{2}$ ₈.
 Warmest 7, 44, S. W. 1_x. }

Pleurifies and peripneumonic Fevers, as moreover Intermittents, and the Small-pox, up and down. — Several Rheumatisms, Coughs, Pains in the Teeth, Fauces, with a Swelling of the Glands, very common. — Numbers were troubled with the Colic, partly owing to the
 Drinking

Drinking new Cyder, and partly to the superabundant and acrid Bile; the Gripings were often very severe, with a very great Heat of Urine.

D E C E M B E R.

Full Moon the 8th. New Moon the 22d.

The Barometer stood high during this Month, but the Air was generally very dense, and often very cold; but towards the Conclusion it was much milder.—In the Beginning of *December* the Wind was frequently north-easterly, but at the End north-westerly and south-westerly, and sometimes quite lulled.

Rain $\frac{1}{8}$. $\frac{2}{9}$. $\frac{1}{10}$. 11. 17. $\frac{1}{20}$. 21. $\frac{2}{22}$. 23. 25.
Dig. Dec.
28. — Hail 12. — Snow 13. = 1.394.

A Storm the 11th, p. m. lasting till Midnight, N. W. b N. 4. — A. B. the 14th, H. 9, p. m. N. E. b N. 1. — The 24th, in the Evening, N. W. 2_x.

Greatest Height of ☿	14, 30.6, N. E. 1.	}	Mean Height
Least	11, 29.3.		
			30.0. $\frac{2}{3}$.
Coldest Day	14, 70, very severe Frost.	}	Mean Height
Warmest	23, 50, S. W. b S. 3.		
			57 $\frac{2}{3}$.

Several colical Disorders, some owing to the Acrimony of the Bile, a great many more nevertheless from drinking bad Cyder, and such as had not been well purged from the Lees.—

In

In such Persons, the Bowels are generally laxative, and there often comes on a mucous Dysentery, frequently a bilious, sometimes a bloody.

Innumerable Coughs, with a Swelling of the Fauces, Cheeks, and Parotids.—The Peripneumony up and down.—The *catarrhal* Fever very common, which was frequently cured by a large Discharge of thick and high-coloured Urine.

A particular Kind of a *catarrhal*, malignant Fever raged greatly amongst the *French* and *Spanish* Prisoners, and destroyed Numbers of them: Frequently *Petechiæ*, not uncommonly Parotids, and often angry, watery Pustules, were the Attendants of it. This Fever began chiefly with a Pain of the Head, Back, and the Region of the Præcordia; immediately came on a Phrensy, a short, sighing Kind of Respiration, a Tremor, Subfultus, and, in a very short Time, Death.

The whole Quantity of Rain for the Year

Dig. Dec.

1744 = 31.444.



OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1745.

JANUARY.

Full Moon the 7th. New Moon the 21st.

 IN the Beginning of the Year the Barometer stood high, the Wind was frequently north-easterly, often also we had a very cold south-easterly Wind, which frequently produced a smart Frost. After the 20th of this Month it blew at one Time south-westerly, at another Time north-westerly. The Atmosphere was generally very humid, especially upon the Melting of the Ice and Snow.

Rain 3. 4. $\frac{'''}{10}$. $\frac{''}{11}$. $\frac{''}{12}$. 13. 20. $\frac{''}{21}$. 22. 23.

$\frac{''}{25}$.

$\frac{''}{25}.$ $\frac{'}{27}.$ $\frac{''}{28}.$ 30.—Snow $\frac{''}{9}.$ 17.—Hail 27.
 Dig. Dec.
 31. = 2.910.

A violent Storm, with continual Snow, the 9th, S. E. 4.

Greatest Height of 8 1, 30.4, N. 2. } Mean Height
 Least ——— 26, 28.7, S. W. 3. } 29.6 $\frac{23}{100}$.

Coldest Day 9, 69, S. E. 4. } Mean Height 61 $\frac{2}{3}$.
 Warmest 25, 54, S. W. 3. }

Colics still up and down : Rheumatisms, Pleurifies, and Peripneumonies, both true, and of the bastard Kind, here and there : A great many Persons were plagued with Swellings of the Fauces, Cheeks, Parotids, nay, and often of the Head ; to which were generally added a Cough and Rheums : Ophthalmies common.

The malignant, *catarrhal* Fever was now exceeding rife, and destroyed a great Number of the Prisoners ; and also not uncommonly those of our own People, who were much conversant with them. — Several lingered on a long Time in it, but more frequently it proved more acute, and suffocated Persons in the Manner of a Peripneumony or a Quinsy ; — frequently also Petechiæ attended it, and often a bloody Dysentery. — These however observed no certain Time or Period. — Many of those People were seized with a Mortification of their Feet, owing perhaps to the Cold and their own Beastliness.

Full

F E B R U A R Y.

Full Moon the 5th. New Moon the 20th.

This Month was very cold, the Wind blowing very often north-easterly, sometimes south-easterly, and very seldom south-westerly. The Atmosphere was always dry and thin; now and then a most sharp Frost: In the Middle of *February* the Station of the Barometer was very high.

Rain $\frac{1}{5}$. 9. $\frac{1}{14}$. 19. 22. — Hail 2. 6. 23.
— Snow $\frac{11}{26}$. 28. = 0.838.

A large Fall of Snow the 26th, altho' the Wind was W. S. W. 3, Therm. 70.—A great *A. B.* the 9th, H. 10, at Night, N. N. E. 1.—A small one, H. 7. p. m. E. N. E. 2^x.

Greatest Height of	8	18, 30.6, E. N. E. 2 ^x .	} Mean Height
Least	5,	29.2, S. E. 1 ^x .	
Coldest Day	25, 75,	N. E. b N. 1 ^x .	} Mean Height 65 $\frac{1}{2}$ $\frac{3}{8}$.
Warmest	15, 58,	E. S. E. 2.	

Several People laboured under a very violent Asthma: Coughs, Pleurifies, and Peripneumonies very common, nay, and often very severe, there being a difficult and very sparing Expectoration.—The Blood that was drawn was very fizy, and covered over with a thick Buff; but the Serum was greenish or yellowish, but very thin.—This also was observable in the

Rheumatism, which very violently, as well as for a long Time, tormented Numbers.

The malignant, catarrhal Fever, still raged among the Prisoners, and made vast Havock ; it seized the Nurses, that attended the Sick, and also some of the Surgeons, and even carried them off. — Frequently at the Height of the Fever, and often also at the Conclusion, there broke out watery, angry, and often livid Pustules, sometimes darkish and black Spots, and frequently *Aphthæ*. — None of those Things however seemed to be of any great Service ; for a plentiful Expectoration (provided it be not livid, sanious, foetid, which too frequently happens) is of far greater Consequence to the Patient, as is also a mild and equally-diffused Sweat. — I dread however always a profuse one, which, being frequently oily, and then turning into a cold one, at length proves fatal, and that infallibly, if a Shivering comes on. — In such a Case nothing is more serviceable than some red Wine, with Spices boiled in it, — especially if a Diarrhœa, whether of the mucous or bloody Kind, a Thing which often happens, calls for it.

M A R C H.

Full Moon the 6th. New Moon the 22d.

The Weather was very rainy and dirty in the Beginning of *March*, which rendered the Atmosphere

sphere very dense and moist. The Wind was very often south-south-west, frequently north-west, and sometimes south-east.

Rain $\frac{''' }{4.}$ $\frac{'}{5.}$ $\frac{'}{6.}$ $\frac{'}{7.}$ $\frac{''' }{8.}$ $\frac{''' }{9.}$ 10. $\frac{''' }{11.}$ $\frac{'' }{13.}$ 15—17.

$\frac{'' }{24.}$ 25. 27. $\frac{'}{28.}$ $\frac{'}{29.}$ ——— Hail and Snow $\frac{'}{1.}$ 2.

Dig. Dec.

3. = 4.694.

A Storm early in the Morning of the 1st, W. S. W. 4.—The 9th, at Night, S. W. b S. 4_x. —The 29th, at Night, N. W. — Very great Fogs from the 24th to the 27th.

Greatest Height of	8	25, 30.0, N. W. 1.	} Mean Height
Least	————	10, 29.1, W. 3.	
			29.5 $\frac{2}{3}$.

Coldest Day	2, 64, S. W. b W. 2, Snow.	} Mean Height
Warmest	21, 42, N. 1.	
		51 $\frac{4}{5}$.

Coughs very common : Swellings of the Neck, Cheeks, and Head every-where : A great many *catarrhal* Fevers.—The malignant Kind raged very greatly amongst the Prisoners and our own Sailors.—Not a few Pleurisies, and Peripneumonies both of the true and spurious Kind.

A P R I L.

Full Moon the 5th. New Moon the 20th.

This Month was also rainy, and a cold north-west Wind blew in the Beginning of it. From the 14th to the 28th the Wind was almost con-

stantly north-easterly, attended nevertheless frequently with Rain, and that very cold.

Rain 1. 3. 4. $\frac{1}{5}$. 6. $\frac{11}{8}$. 9. $\frac{11}{10}$. $\frac{11}{11}$. 12. 13.
 17. $\frac{11}{20}$. $\frac{11}{21}$. $\frac{11}{22}$. $\frac{1}{23}$. 25. $\frac{11}{26}$. $\frac{11}{28}$. $\frac{11}{29}$. — Vio-
 Dig. Dec.
 olent Hail 7. 11. = 3.912.

A violent Circius all Night the 3d.—A very large Halo about the Moon the 2d, H. 10, at Night.—A very stinking Fog all Day the 13th, S. 1x.—Ice every-where the 27th in the Morning, E. N. E. 2.

Greatest Height of ☽ 16, 30.1, E. N. E. 2x. } Mean Height
 Least ——— 21, 28.8, N. 2x. } 29.5.

Coldest Day 27, 55. } Mean Height 48 $\frac{1}{2}$.
 Warmest 14, 40, E. 1. }

The Rheumatism up and down : The Sciatica, and that too very violent, more rife than usual : A great many People were seized with Pleurifies, and Peripneumonies as well true as the bastard Kind : Coughs, Swellings of the Fauces, and Pains of the Teeth, with a Soreness of the Throat, attacked Numbers : Some intermitting Fevers, and, among the younger People, some Measles and scarlet Fevers.

The *catarrhal* Fever still continued, in which the Sick frequently lingered on a long Time, but more frequently it finished its Course in a short Time : Towards the Conclusion of it People generally had a very large Expectoration of viscid,

viscid, salt Phlegm, often without any Cough, frequently with a troublesome Cough, which gave great Relief. The Urine in general was crude, seldom very high-coloured; Tongue whitish, but scarce ever black or furred; a slight Delirium now, or a Silliness, always came on at the State of the Disease. — The *catarrhal*, malignant Fever as yet destroyed Numbers.

M A Y.

Full Moon the 4th. New Moon the 20th.

The Weather was sufficiently mild in the Beginning of this Month, the Wind blowing easterly; but after the 10th it was moist and cold, and the Wind almost constantly south-west.

Rain 2. 11 — 15. $\overline{16}$. 17. $\overline{18}$. $\overline{19}$. 20 — 31.

Dig. Dec.

—Hail 16.—19. a. m. = 1.732.

A Storm the 16th, early in the Morning, S. W. 4x. — Thunder and Lightning the 19th, a. m.

Greatest Height of ☿	5, 30.0, E. N. E. 2x.	} Mean Height
Least	16, 28.9.	

Coldest Day	20, 48, W. b N. 2x.	} Mean Height 40 $\frac{3}{31}$.
Warmest	6, 33, E. 2.	

The Measles and scarlet Fevers were epidemic here and in the Neighbourhood: They were very often attended with a Cough, and

peripneumonic Symptoms, to the Relief of which nothing proved more opportune than Bleeding.

Several *catarrhal* Fevers still, some of which were dangerous and tedious.—The Urine was generally very crude, and now and then wheyish, throwing down no Sediment at all during the Course of the Disease.—The Tongue in general was moist, but foul, and of a dirty Colour; the Expectoration generally large, and that always propitious.—On the contrary, where the Tongue was black and dry, and the Expectoration but very sparing, the Patients seldom recovered; for presently they became short-breathed, delirious, shivering, seized with a Palpitation, and at length yielding under the Force of their Disorder, unless relieved by Blistering and a plentiful Sweat, which (I know not how) it was difficult to procure. A Looseness also frequently was of very great Service to the Sick.—An Heaviness and Lightness in the Head also were almost constantly observable in the Beginning of this Fever, and also a slight Delirium and Deafness in the Advance of it, and, thro' the whole Course of it, a very great Spitting, altho' sometimes there was not the least Cough.—So that Nature always aimed at a Crisis by the salival Ducts.

The Small-pox, miliary and also pustular Fevers,

Fevers, here and there : The Itch common : Some Ophthalmies and Quinseys.

A particular Kind of bastard Peripneumony, which often lasted for a very long Time, and at last carried off the Sick in the Manner of a slow nervous Fever, altho' in the Beginning, there was no great Inflammation, was common.—The Blood of those People, when it was drawn, was in general found to be for the most Part thin and florid, which is always a bad Symptom ; nor did such Persons bear a large Loss of it without very great Risk of their Life, altho' Breathing appeared difficult, and there was a great Load upon the Breast ; and yet it was surprising how those People were immediately weakened * by the Taking-off a little Blood.—This Disorder prevailed chiefly thro' the southern Parts of this County, and perhaps was nothing else than the *catarrhal Epidemic* chiefly turned upon the Lungs. — *Camphire, Saffron, Lap. Contrayerv. Gum. Ammoniac. Oxymel scillitic.* with very thin mustard-seed Whey, were the most suitable Remedies, and Blisters also were very serviceable.—Few Persons, who had an Eruption of Pustules at the Close, and a Sweat, died in it.

* See the *Essay on Fevers*, Page 225.

J U N E.

Full Moon the 3d. New Moon the 18th.

This Month also was very cold and rainy, the south-west Wind blowing very often, and often the north-west; however the Wind was south-easterly from the 21st to the 24th.—The Atmosphere was very dense and humid, and the Weather melancholy; indeed every Thing was so wet and dirty, that any one would have taken it for Winter rather than Summer. A Butterfly, nay, a common Fly, was very seldom if ever seen; and all Things were in a quite torpid State.

Rain 1. $\frac{1}{5}$. $\frac{1}{6}$. $\frac{1}{7}$. 8. 9—13. $\frac{1}{14}$. $\frac{1}{15}$. 19.
 $\frac{1}{22}$. 23. $\frac{1}{24}$. $\frac{1}{25}$. 27. 28. = 2.760. Dig. Dec.

Very terrible Thunder and Lightning the 22d at Night between Ten and Twelve, which Storm raged far and near.

Greatest Height of ☽ 18, 29.8, W.N.W. 1. } Mean Height
 Least ——— 25, 29.2, S.W. 3x. } 29.5 $\frac{1}{30}$.
 Coldest Day 12, 48, W.N.W. 2. } Mean Height 37 $\frac{1}{30}$.
 Warmest 22, 24, S.E. 2x. }

The Measles were still very rife, with which even grown Persons themselves were also seized: Rheumatisms, Swellings of the Fauces, Quinsies, and Coughs, were common: Intermitting Fevers up and down,

The

The malignant, putrid Fever, often attended with red Pustules, and frequently with Petechiæ, now raged very greatly. — There were also prodigious Hæmorrhages from the Mouth, Nostrils, and Uterus, especially when there were very large livid, black, or violet-coloured Spots *. — In the Beginning there came on a slight Shivering, presently after a Pain, with an Heaviness and Giddiness in the Head; several had a Nausea and Vomiting; immediately there came on in every body a very great Oppression of the Præcordia, and a very troublesome Anxiety, so as to make them always restless, which infallibly brought on a Delirium, and at length a Lethargy. The Urine in general was very crude and limpid, having seldom any Sediment; but towards the Close depositing some livid or bran-like Matter, and sometimes that which was quite black. The Tongue, Teeth, and Fauces were black, dry, and furred, and the Breath was exceeding offensive. — Several were seized with a mucous or blackish Diarrhœa, with sometimes Streaks of Blood. — Numbers struggled long with their Disease, but several fell a Sacrifice to it within eight Days; nor indeed were there several Instances wanting of such Persons as quite got the better of it.

This Disorder chiefly raged amongst the Pri-

* *Essay on Fevers*, Page 96.

foners and our own Sailors, and also several Persons in the Neighbourhood were attacked by it; — whether this was occasioned by the Contagion, or from the very Constitution itself of the Atmosphere, is what I am not certain of; for this Disease appeared to be very little infectious, except in the very Hospitals themselves. Every one was troubled every-where with a great Weakness and Loss of Spirits, and that even amongst those Persons who were well.

J U L Y.

Full Moon the 2d. New Moon the 18th.

Now at length the Summer made its Appearance. There was but little Rain, except in the very Beginning and towards the End of the Month; the Wind was generally northerly, and very seldom southerly. The Sun was frequently warm, which made the Atmosphere much more thin, and by far drier. — Now and then there were very great Dews, and sometimes Fogs, the Wind blowing very gently.

Rain $\frac{''}{1}$. 2. 3. 18. 19. $\frac{'}{27}$. $\frac{'''}{28}$. = 1.208. Dig. Dec.

Greatest Height of $\frac{x}{30}$, 30.0, N. b W. 2. } Mean Height
Least ——— 1, 29.2, S.W. b S. 2. } 29.7 $\frac{6}{36}$.

Coldest Day 30, 36. }
Warmest 13, 22, N. 1. } Mean Height 28 $\frac{12}{36}$.

Some intermitting Fevers, some Peripneumonies, a great many Ophthalmies. — The Measles

Measles epidemic, and frequently fatal; a violent Cough and hectic Fever generally attended, and continued a long Time; several Times a Flux, and that too a colliquative one, followed upon the Departure of the Measles; not uncommonly an Ophthalmy, a Quinsey, and Ulcerations of the Fauces; sometimes a Parotitis, with an Erysipelas in the Head. I have more than once during this Month observed a Mortification of the Fauces and Mouth, and besides a Caries of the Cheeks and the Os Vomeris, which occasioned a very painful Kind of Death, and that too after the Measles.

The putrid, malignant Fever, which had long raged, still prevailed, but chiefly amongst the Sailors and Prisoners, and that often attended with small Spots, dark or blackish; sometimes with black and blue Pimples all over the Body; and frequently large corroding Pustules broke out: Now also the Sick were more troubled with a Vomiting than before, which was very soon succeeded by a violent Diarrhœa; besides which frequently they fell into much more profuse Sweats, but those were in all Appearance so far from being serviceable, that they rather occasioned a very great Loss of Strength. — If however the Looseness was too suddenly checked, it most infallibly soon brought on a Delirium, or a profound Lethargy, with an hard Swelling of the Abdomen, and a Singultus,

gultus, than which there was not a more fatal Symptom. Every one almost at the State of the Disease was more or less delirious, and always had a Deafness. — Whatever Blood was drawn had a bright red, florid Appearance, or else a livid and blackish, and was covered over with a greenish or livid Mucus, and was always by far too much dissolved*. — This Fever appeared to me to be almost of the very same Nature with that malignant one which I have described in the Year 1740, and therefore I used the same Course of Medicine (thro' the Blessing of God) with a great deal of Success.

A U G U S T.

Full Moon the 1st. New Moon the 16th.

Full Moon the 30th.

From the 3d Day of the Month to the 17th a great deal of Rain fell, and there was a melancholy Atmosphere: In the Beginning the Wind was south-easterly; afterwards south-westerly; — after this, home to the End, we had a fair sun-shine Set of Weather, which was very agreeable to the Harvest-People. There now also fell very great Dews; and at length innumerable Grasshoppers chirped merrily; moreover the Flies also, reviving as it were at

* See the *Essay on Fevers*, Page 108.

Sun was very scorching ; and yet a very great Hoar-Frost on the 20th. The Wind during the whole Month was almost easterly, and from the 20th to the 28th very brisk.

Rain $\frac{''}{2}$. 3. 4. $\frac{'}{5}$. 7. 8. $\frac{'}{16}$. 28. 29. $\frac{'}{30}$.
 Dig. Dec.
 = 1.078.

Thunder and Lightning in the Morning of the 28th.—A Storm the 22d, E. S. E. 4.—A very great Halo about the Moon the 26th at Night.

Greatest Height of ☉	11, 30.1, E. 1.	} Mean Height
Least	2, 29.2, S. b E. 2.	
Coldest Day	24, 46, E. 3.	} Mean Height 35 $\frac{5}{36}$.
Warmest	15, 26, E. S. E. 1.	

The Small-pox rife : Diarrhœas and the Colic up and down : Some bloody Dysenteries.—Several People still laboured under a putrid malignant Fever, with Petechiæ, Delirium, Singultus, &c.—Many were plagued with a most violent Asthma, and several others with a Swelling of the Fauces, Cheeks, and Parotids : Many Ophthalmies.

The Measles were common, even amongst grown Persons, and carried off several ; frequently in the Manner of a Peripneumony, often in that of a slow Hætic : It was no uncommon Thing for a bloody Dysentery to attend it, but much more for a profuse mucous Diarrhœa to do so ; sometimes there were very terrible
 Ulcers

Ulcers in the Mouth, which occasioned a Caries of the Maxillæ.

O C T O B E R.

New Moon the 14th. Full Moon the 29th.

This Month was very melancholy, and very rainy, there being scarcely more than one or two dry sun-shine Days; the Atmosphere very dense and humid; the north-west Wind blew in the Beginning of the Month, and afterwards very often a violent south-west Wind; now and then a southerly; and, towards the End, a south-easterly.

Rain	$\frac{''}{1.}$	$\frac{''}{2.}$	$\frac{'}{3.}$	4.	$\frac{'''}{5.}$	$\frac{'}{6.}$	8.	$\frac{''}{9.}$	10.	$\frac{''}{12.}$	$\frac{'''}{15.}$
16.	$\frac{'}{17.}$	$\frac{'}{18.}$	$\frac{'}{19.}$	$\frac{'}{20.}$	$\frac{'}{21.}$	$\frac{'}{22.}$	$\frac{'}{23.}$	$\frac{'}{24.}$	$\frac{''}{26.}$	$\frac{''}{28.}$	$\frac{''}{29.}$
Dig. Dec.											
30.	$\frac{''}{31.}$	Hail 3. 22. = 5.896.									

A violent Circius the 1st in the Morning.—
A Storm the 5th in the Morning, S. 4.—The
8th, S. W. 4x. p. m.—A very vivid lunar
Rainbow the 1st, H. 7, p. m.

Greatest Height of	☿ 14, 30.2, E. 1.	} Mean Height
Least	5, 28.7, S. 4.	

Coldest Day	30, 54, S. S. E. 2x.	} Mean Height 46 $\frac{1}{2}$.
Warmest	11, 38, S. S. W. 2.	

The Measles very rife still: The Small-pox epidemic: Colical Disorders and Rheumatisms here and there: Many Ophthalmies: Some laboured

boured under a bastard Peripneumony, and some were struck with an Apoplexy. Coughs, Rheums, Head-achs, and catarrhal Fevers, in great Number : Slow and nervous Fevers not uncommon.

N O V E M B E R.

New Moon the 12th. Full Moon the 28th.

The Wind was easterly to the 14th of the Month, generally inclining to the North, then north-easterly, and presently succeeded a violent southerly Wind, which brought much Rain with it, and a little after however a cold north-easterly Wind returned ; at the very Conclusion of the Month it blew south-westerly. The Atmosphere in general was very cold, dense, and moist.

Rain 1. [/] 2. 12. 13. ^{''} 14. ^{'''} 18. [/] 19. 20. [/] 21. ^{'''} 22.
 23. 26. [/] 30. — Snow 15. 16. = 3.522. Dig. Dec.

Much Lightning without Thunder the 1st at Night, S. E. 1^x.—A Storm the 18th, S. b W. 4. —The 19th, p. m. S. W. 4^x.—A violent Cirrus the 19th at Night.—A very sudden and great Fall of the Barometer on the 18th, viz. from 29.7 to 28.8, and that within six or eight Hours.—A severe Frost the 16th, 17th, 21st, and 25th.—A very thick and stinking Fog the 23d, p. m.

Greatest Height of	8 6, 30.3, E. N. E. 1 ^x .	} Mean Height
Least	19, 28.7, N. W. 4 ^x .	
Coldest Day	16, 71, N. b W. 1.	} Mean Height 57 $\frac{1}{3}$.
Warmest	1, 46, S. E. 1 ^x .	

The Small-pox every-where epidemical, and at present some of a very bad Kind ; however they were very favourable during all the Autumn : Several Ophthalmies, and obstinate De-fluxions from the Eyes :—Some Pleurifies and Peripneumonies.

In the Beginning of the Month a Kind of catarrhal Fever returned again, or rather attacked People again, who were troubled with a violent Pain of the Head and Oppression at the Breast, a continual Nausea, or phlegmatic Reaching ; the Pulse was very quick, low, but seldom tense—the Tongue foul, and of a mud Colour, but scarcely ever dry—the Urine very turbid, depositing thro' the whole Course of the Disease a very pale, but yellowish, and large Sediment.—Every one expectorated very largely.—The Blood which was drawn was very seldom very tenacious, but sometimes somewhat fizy. All the Sick laboured under a Giddiness and too great a Drowsiness : Some were relieved by a gentle Diarrhœa, some by a mild, equal Sweat, but many more by a very free Expectoration after a previous Bleeding, and the giving an Emetic, where it is the Business of Art to second Nature.

D E C E M B E R.

New Moon the 12th. Full Moon the 27th.

In the Beginning of *December* the Wind was north-easterly, and the Weather was dry and cold. From the 11th to the 15th we had a rainy, south-easterly Wind, and a little afterwards a violent southerly ; towards the Close of the Month it was easterly : The Atmosphere was very dense, and, about the Middle of the Month, very moist.

Rain 1. 11. 12. $\frac{''' }{13}$. $\frac{''' }{14}$. 15. $\frac{' }{16}$. 17. 19. 20.
 $\frac{''' }{21}$. 22. $\frac{' }{23}$ — $\frac{' }{25}$. 26. $\frac{'' }{30}$. = 3.410. Dig. Dec.

A Storm the 13th, p. m. S. E. b S. 4x. — The 19th, all Night S. 4. — The 20th in the Morning, S. W. 4. — The 23d, at Night, S. W. 4. — The 24th, almost all Day, S. W. b W. 4.

Greatest Height of ☿ 2, 30.4, E. N. E. 1x. } Mean Height
 Least ——— 14, 29.0, S. S. E. 3x. } 29.5 $\frac{7}{3}$.
 Coldest Day 7, 70, N. E. 2x. }
 Warmest 19, 50, S. 4. } Mean Height 59 $\frac{23}{36}$.

Violent Coughs, and Asthmas common : The Small-pox very epidemic, far and near, some of which were confluent, small, pitted, black ; some however were very favourable. — Several pustulary Fevers (the Chicken and Swines' Pox) amongst Children. The Old Women frequently take those red and watery Pustules

rules for the true Small-pox (for they often leave Marks a long Time behind them;) but frequently, a little While after, they discover their Error by melancholy Experience, the Small-pox, and those too of the malignant Kind, really attacking the People.

Peripneumonic Fevers, and those very dangerous ones, being often fatal, were now very rife. Some People had little or no Expectoration, but the greater Part spit up very bilious pure, or frothy undigested Matter, and some a Sanies almost quite black: They sobbed very greatly, and were much oppressed at their Breast.—In my Opinion, Persons in Peripneumonies are in greater Danger, when they labour under a very great Oppression at their Breast, and there is a very heavy Load on the Præcordia; altho' the Pain itself be only slight and obtuse; than if they were visited with more acute Pains of the Breast and Side; since in this Case Bleeding brings almost certain Relief, whereas in the former Case it is so far frequently from being beneficial, that it is not a little detrimental. At present there were several Peripneumonies, where there was a vast Load upon the Breast, a great Difficulty of Breathing, a very great Cough, and a considerable Wheezing from the Lungs; which nevertheless scarcely admitted * Bleeding. Perhaps you might hope

* See the *Essay on Fevers*, Page 108, 211.

for great Assistance from repeated Bleeding ; whilst, on the contrary, this occasions the greatest Weakness, a Stoppage of the Expectoration, violent Anxiety, constant Restlessness, presently a Delirium, Tremors, cold Sweats, and at length too often an unexpected Exit, and that frequently amidst People's Sighing, and Talking itself.—However, diligently examine the Blood of such Persons, and it always is found too dissolved, altho' it is generally florid and specious, and for a long Time preserves its Serum : Examine it at another Time, and you will find the Crassamentum livid, and exceeding dissolved, and swimming in a great deal of tawny, turbid, greenish, or reddish Serum ; again, at another Time, it is almost black, and sanious, and not having the least Cohesion.—I have always remarked that this was a very bad Omen in a Peripneumony, and generally a * fatal one.

There also at this Time were Numbers labouring under a *Pleuro-peripneumony*, especially the Country-People ; who were seized with a Pain in the Breast or Side, violent Cough, whose Breath was hot, interrupted, and very difficult ; their Pulse full, hard, and quick ; and their Countenance red and bloated. — These Symptoms required a speedy and large Bleeding, and even a Repetition of it, by which they were presently very much relieved.—The Blood howe-

* See the *Essay on Fevers*, Page 108, 211.

ver of those People was very thick and viscid, and in growing cold was covered over with a whitish, and as it were a leather-like Pellicle. — Besides Bleeding, subacid, nitrous Diluents, and such Medicines as promoted Expectoration, generally removed the Disorder in a short Time.

The former Kind of Peripneumony however this Month prevailed most here, in which the Urine was generally in the Beginning quite crude, frequently limpid, but now and then of a milky Appearance; at the End however it was sparing, turbid, and blackish. The Tongue was covered over with a Kind of a black Mucus, or very dry and dark red Colour, resembling the Rind of a Pomegranate; but frequently also very smooth, livid, and as it were shining; but exceeding dry, with sometimes a black Bubble at the very Tip of the Tongue. — Those Appearances were pestilential and fatal, especially if sanious, black, and very foetid Matter was expectorated.

In very Truth, it is a Thing of no small Moment to make a proper Distinction between those two Sorts of Peripneumonies, especially at the Beginning of the Disease, when a great Oppression at the Breast and Difficulty of Breathing, the violent Heat of the Fever, and the Violence of the Cough, accompany each, and seem equally to require Bleeding. The for-

mer Kind of Peripneumony however, and that which was more common, scarcely admitted of a fourth Part of the Quantity of Blood's being drawn, without a great Loss of Strength; which the latter not only suffered easily, and very often indeed absolutely demanded.—How then is this Distinction to be known?

If the Pulse is very quick, slender, and contracted, or low, unequal, and fluttering: If the Breathing is laborious, and attended with frequent Sobblings, rather than with an hot Panting: If the Load upon the Breast is greater than the Pain, the Urine is crude, very limpid, and vapid—or profuse, unequal; or cold little Sweats should break forth:—If a considerable Languor, and Tremor of the Hands, should come on, Bleeding is very cautiously and sparingly to be used, if indeed a Vein is to be opened at all: Should the Cruor, however, when cold, appear too much dissolved, and have no firm Cohesion, however florid it may be, immediately hold your Hand, unless you have a Mind to cut your Patient's Throat. If you have any Doubt about Bleeding, this is the certain Sign to know whether it is proper or improper; and therefore, in a doubtful Case, at the first Setting-out, never be too prodigal of the vital Fluid, which indeed is often to be corrected, not to be thrown away.—Nevertheless, should the Pulse be full, quick, tense, or
beat

beat very hard, and the Fever run very high ; if the Breath should be very hot and dense, the Pain in the Breast be very troublesome, and the Countenance red and swoln, Blood is always to be drawn, and that with a full Stream, and largely ; nay, if the Difficulty and Pain in Breathing should still be very oppressive, this Bleeding is to be twice or thrice repeated, especially if a yellowish and very fizy Crust should inhere to the Cruor when drawn.

At this Time a particular Kind of putrid Fever prevailed very much, under which the Sick lingered very often a long Time, and to many it proved certainly fatal : It not uncommonly was protracted to the twentieth Day, nay, sometimes even to the thirtieth. A slight Shivering in the Beginning spread itself all over the Body ; this was succeeded by a sudden and uncertain Heat, and thus alternately : Besides this, a Lassitude and wandering Pain molested all the Limbs ; there always immediately succeeded a Pain in the Head, and often a very acute one in the Forehead, Temples, Sinciput, and sometimes in the very Bottom of the Eyes : In the mean Time the Pulse was quick, tremulous, and unequal, and also not uncommonly evidently intermitting, and intirely interrupted by a little stronger Pressure of the Finger.—The Urine very thin, and like a mere Water, or else quite turbid, like that of

* Horses, but depositing no Kind of Sediment.— The Tongue was not very dry, nor did the Patients thirst much; but the Fauces very foul. — In the mean While a bilious, greenish, or dark Vomiting, and that often too a very fœtid one: At the State of the Disease, a vast Anxiety, perpetual Agitations, and an obstinate Restlessness brought on a Delirium and Tremors, with a Subfultus of the Tendons; towards the Close, the Tongue and Lips became tremulous, and very dry and black, and the Teeth also black and very foul. A Singultus, Glasing of the Eyes, cold Sweats, livid Nails, and a Failure of the Pulse, denounced instant Death; altho' sometimes the Sick lay stupid, without Sense, Motion, or Speech, for some whole Days before that they expired, their Hips and their Buttocks in the mean Time being mortified.

In this Manner Numbers yielded to this Fever; however it more frequently raged with greater Severity. — At the very Onset of the Disease there came on an Anxiety, and a vast Load on the Præcordia, a very violent Pain in the Head and Back, a perpetual Vomiting of greenish, black, dreadful Stuff, constant Singultus, black Tongue and Teeth; presently they were seized with a Phrensy and Trembling all

* "Ουρον ανατεταραγμένον οἶον ὑποζυγίου. Aph. 70, Sect.
See *Holler* on the Aphor.

over the Body, and at length were often oppressed with an heavy Drowsiness, nor ever awoke.—Between the sixth and ninth Day, in general, Petechiæ appeared, often livid, often also very black, which sometimes of a sudden vanished, being succeeded with a profuse Sweat or Diarrhœa, with which they were very frequently afflicted. Often Blood dropped from the Nostrils, and sometimes gushed out; by which Means indeed the Delirium was abated, but the Strength very greatly lessened. — The same Thing also may be said about the Flux, which oftener happened.—Sooner or later, almost always, during the Fever, Nature aimed at a Crisis by a Looseness; but often the Disease terminated in Death; frequently, however, victorious Nature triumphed. If the Discharges were black, very liquid, or sanious, and very foetid, I had no Hopes, especially if they were involuntary; nor indeed was a tumid, hard Abdomen, the Flux still continuing, if a Singultus also came on, and there was a small Discharge of Urine, which I have almost always observed to be dark-coloured, and sometimes quite black, a more favourable Omen.

Thus, Reader, you have had the History of this Fever, which, whether you term it a *scorbutic*, a malignant, or pestilential, I do not trouble myself about; it was indeed very fatal, and

discovered not a few Signs of a very great Putrescence, and also of a Contagion.—Of whatever Kind it was, it admitted of a very sparing if any Drawing of Blood, at least from the larger Vein, without an amazing Loss of Strength.—I generally excite for the most Part, or rather promote, a Vomiting; because, of its own Accord, it almost always requires it; and I also give a Clyster, where there is too great a Costiveness. Afterwards I have recourse to the milder *Alexipharmacs*, and those austere ones, with the Addition of Acids in them; amongst which I prefer none, as better, or indeed safer, than red Wine itself, with half the Quantity of Water, in which a little Mace or Cinnamon has been boiled, with a *Seville-Orange* roasted, and then bruised and infused in it: This Kind of Liquor is both very grateful and very well adapted to the Disease.—If you want any other Things of this Kind, *Tinct. Rosar. Decoct. Lusitan.* with *Aq. Cinnam.* and *Sp. Lavend. C.* or very thin Sack-Whey, may be used; nor indeed, to such Persons as are very desirous of it, and are very thirsty, do I now and then prohibit the Drinking some warm Cyder: I utterly reject all * volatile alkaline Salts, and Spirits, as they are called, nor ever use them, but with the *saline Draughts*. Those, or some such Me-

* See the *Essay on Fevers*, Page 118.

dicines as those, I prescribe even home to the State of the Fever; in the mean Time, if the Delirium is violent, I order Cupping, and Scarifying on the Neck and Shoulders, and often, after that, Blisters to be laid on, especially if the Languor should be very great. Besides, I direct some mild *Eccoprotics* to be given every third or fourth Day, provided there is too great a Costiveness.—In the very *Ἀκμὴ* itself I do but little, diligently observing which Way Nature acts, or what she will admit of.

If the Skin should be very dry, and rough, I order Camphor. with Theriac. or Mithridate, and the volatile saline Draughts. or Julep camphorat. with Vinegar, Sp. Lavend. C. and Syrup. Crocin. and this with Success in general, if kindly Sweats come on, and there are florid angry Pustules.—If this does not succeed, another Method is to be attempted, namely, by Stool and Urine; and therefore I prescribe a little Rhubarb, with Sal. Succin. and Nutmeg, at least every other Day; or else Manna Calabrin. Crem. Tart. and Tart. solub. — If there is too great a Looseness, I restrain it by Degrees, with Tinct. Rosar. Decoct. alb. Confect. Fracast. I seldom prescribe stronger Opiates, except Theriaca;—my great Care now is to support feeble Nature with recruiting Food and proper Physick, and therefore I order Panado, light Broths, Bread, well toasted, in Wine, Hartshorn
Jellies,

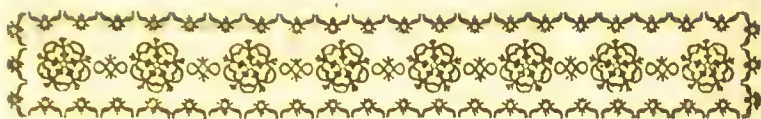
Jellies, Sago, Salop, and other Things of this Kind. — As to Physick, I chiefly make use of *Tinct. Cort. Alexipharmac*, which I have now for a great Length of Time experienced, and approved of, in the Decline of the putrid Fever; but I always almost add to it *Elix. Vitrioli*. — By the Use of this Method indeed, and this Course of Medicine, I have known many that were snatched out of the very Jaws of Death. — However they continued for a long Time deaf and stupid, their Tongue being also dyed over with an almost indelible Blackness.

The whole Quantity of Rain for the Year

Dig. Dec.

1745 was = 35.476.





OF THE
A I R,
AND
EPIDEMIC DISEASES,
For the YEAR 1746.

JANUARY.

New Moon the 10th. Full Moon the 26th.

THE Wind was very unsettled this
Month, being often cold, often rainy:
In the Beginning of the Month it
blew easterly; on the 7th and 8th a south-wes-
terly Wind set in; from the 10th to the 16th
an easterly, or a north-easterly; from thence
to the 29th a north-west or a south-west gene-
rally raged here; but at the very Conclusion
a north-east.

Rain 1. $\frac{''}{7}$. $\frac{''}{8}$. 16. 18. $\frac{''}{19}$. 20. $\frac{''' }{21}$. $\frac{''}{23}$. 24.
 $\frac{'}{25}$

$\frac{1}{25}$. 26. $\frac{111}{27}$. 28. — Hail 29. — Snow 30.
 Dig. Dec.
 = 3.496.

A Storm the 23d at Night, S.W. b W. 4x. —
 The 25th, all Day, S.W. b W. 4. — The 27th,
 p. m. S.W. b W. 4x. — A very violent Circius
 at Night between the 27th and 28th. — A severe
 Frost, and a very great Hoar-Frost, the 5th,
 6th, 13th, 14th, 15th, 29th, and 31st. — A very
 great Halo about the Moon the 20th in the
 Evening.

Greatest Height of	8	5, 30.4, N. E. 1.	} Mean Height
Least	—	27, 28.8.	
			29.8 $\frac{7}{28}$.
Coldest Day	31, 70, N. E. 1.	} Mean Height	59 $\frac{8}{28}$.
Warmest	25, 50.		

The Small-pox were still epidemical, but
 in general sufficiently favourable; however it
 carried off a great many amongst the Sailors
 and Soldiers; whether this was owing to their
 Blood's being more acrimonious and putrid,
 from their bad Diet, and their Swallowing down
 large Quantities of burning Spirits; or to the
 scorbutic Contagion, nay, and to other Causes,
 and very often to its being polluted from the
 Venereal Disease. This indeed is constantly re-
 markable, that every epidemic Fever is more
 fatal amongst this Kind of People, than it is
 amongst the Towns-Men or the Country-Peo-
 ple. Swellings of the Fauces, Coughs also
 every-where,

every-where, and several had the Measles and Rheumatism.

The putrid, nervous, malignant Fever still raged very much, and destroyed several, and several lingered on in it for a long Time.

Several Peripneumonies of a very bad Kind, with great Difficulty of Breathing and the greatest Anxiety, with a Pain in the very Bottom of the Breast, and an incessant small tickling Cough, often with a very little Expectoration, and often with that which was quite sanious, were now rife.

Those Fevers, after three or four Days, degenerated into a malignant, *nervous*, or *petechial*, and greatly expended the Patient's Strength. — They scarce would bear Bleeding, much less
* plentiful and repeated.

FEBRUARY.

New Moon the 9th. Full Moon the 24th.

A north-easterly Wind blew very often during *February*, which rendered the Air very dry and cold, a very sharp Frost prevailing; in the mean Time the Barometer kept very high. Sometimes however a stormy south-westerly Wind very greatly sunk the Mercury, and brought with it much Rain.

Rain $\frac{1}{7}$. $\frac{11}{8}$. 15. $\frac{11}{17}$. $\frac{11}{18}$. $\frac{11}{19}$. $\frac{11}{20}$. 21. $\frac{1}{24}$. 26.

27.—Much Snow $\frac{1}{14}$. 28.—Heavy Hail
Dig. Dec.

18 at Night. = 2.680.

A Storm the 18th, at Night, S.W. bW. 4x.—
A. B. the 9th, H. 8, N. E. 1.—The 27th,
N. E. 2x.

Greatest Height of $\frac{8}{2}$, 30.6, E. N. E. 1. } Mean Height
Least ——— 20, 28.4, S. W. bW. 3x. } 29.7 $\frac{2}{3}$.

Coldest Day 13, 76, N. N. E. 2. } Mean Height 64.
Warmest 26, 52, N. W. 1. }

The Small-pox still very rife, altho' in general of a much milder Kind; however they as yet proved very fatal to the Sailors, Soldiers, and Prisoners. Those who escaped were very greatly tormented with Sores and Ulcers, and often with an hectic Fever.

A very violent Cough, obstinate Asthma, Quinsys, and Swellings in the Fauces, afflicted Numbers.—Rheumatisms, Pleurifies, and *Pleuro-peripneumonies*, were very common.

A Kind of peripneumonic Fever, which was very pestilential, still raged, and carried off Numbers: There was always a great Load upon the Breast and Præcordia, generally accompanied with a violent Pain in the Head, or, in the Beginning of the Disease, a very great Giddiness, and soon after a Delirium. They expectorated frequently very thin, crude, frothy Matter,

Matter, sometimes very bilious, and that freely enough; but all this proved of very little if of any Service; some also that which was filthy, blackish, and sanious. — At the same Time there was no great Fever, or Thirst, nor was the Tongue very dry; it was nevertheless frequently smeared over with a blackish Kind of a Mucus. If, as the State of the Disease approached, the Urine (which before was tawny-coloured and foul) became of a sudden thin and limpid, there always immediately succeeded a Delirium, and often, soon after, a Singultus, and a fatal Convulsion of the Nerves. — This Fever was frequently removed by a *critical Diarrhœa*, notwithstanding that in other pulmonic Disorders a Flux (at least too great a one) is to be dreaded. An Eruption also of small Ulcers and Pustules about the Lips, altho' it is indeed very troublesome, is a favourable Symptom. — Moreover, red Pimples, and fiery, all over the Body, succeeding a fœtid Sweat, determine the Disease, chiefly towards its Decline, with almost an intire Desquamation of the Cuticle *. — Reflecting therefore upon this Judgment I had formed, I ordered some Patients to be blistered even from Head to Foot; but the Experiment answered not Expectation.

* *Essay on Fevers*, Page 220.

M A R C H.

New Moon the 11th. Full Moon the 26th.

The Beginning of *March* was very dry and cold, the Wind being north-easterly, and attended frequently with a severe Frost. From the 12th to the 21st the Wind was generally south-easterly, and oftentimes there was Rain; sometimes the Wind was south-westerly; but towards the End it again blew north-easterly.

Rain 6. $\frac{1}{7}$. $\frac{1}{14}$. $\frac{11}{16}$. 17. 19. $\frac{11}{20}$. $\frac{11}{21}$. 22. $\frac{11}{23}$.
 24. 25. $\frac{1}{26}$. 29. $\frac{1}{30}$. 31. ——— Snow $\frac{11}{8}$. 10. 11.
 Dig. Dec.
 = 3.072.

An *A. B.* the 14th, in the Evening and Night, W.N.W. 1. — A very large Halo about the Moon the 15th in the Evening, W. S.W. 1^x. — A very great Fog in the Morning, and no Wind.

Greatest Height of	☉	3, 30.5, N. E. 1.	} Mean Height
Least	————	23, 28.8, S. S. W. 3.	
Coldest Day	1, 69,	N. E. b E. 1.	} Mean Height 56 $\frac{2}{3}$.
Warmest	18, 48,	S. E. b E. 2.	

Small - pox scattered up and down: The Measles were again very rife, and frequently of a very bad Sort, being dark and livid, and breaking forth with Difficulty; besides this, they were always attended with a violent Cough,

3

sometimes

sometimes a grievous Peripneumony, and sometimes severe Gripings. — Troublesome Coughs were exceeding common; the Quinsy and Asthma so likewise. — Several were seized with a Spitting of Blood, and such as were consumptive, and affected in their Lungs, suffered now greatly.

Peripneumonies and Pleuro-peripneumonies, which were very dangerous, now raged everywhere: Some Persons expectorated nothing at all, or with very great Difficulty; others, very crude, thin Matter, and from which they received no Benefit; there were some also who expectorated sanious and very foetid Matter. Those who coughed up freely concocted, copious Phlegm, a little tinged with Blood, got over the Disease within a few Days. — The former Symptoms however were always an unfavourable Omen, nor relieved the Breast, the Load upon the Præcordia, the Anxiety, or even the Fever. — Such Persons became delirious almost from the Beginning, or else were seized with a profuse and weakening Diarrhœa, which immediately entirely suppressed the Expectoration, the Consequence of which was always terrible. — A plentiful Discharge of Urine however, which was turbid, and threw down a large yellow Sediment, proved a much more propitious Symptom; whereas that which was crude and limpid was very pernicious; nevertheless, what was very

red, and sparingly discharged, portended no
 * Good.—Such as were blooded in the Coming-
 on of the Disease, and whose Blood was covered
 over with a tenacious Pellicle, of a pale yet low
 Colour, were in general soon relieved; but, on
 the contrary, where the Cruor was more dissolved
 than it ought to have been, and also very florid
 or livid †, it was otherwise. — Several Persons
 had large, angry Pustules, which broke out upon
 them, chiefly about their Lips, and frequently
 also on their Shoulders, Arms, and Legs, which
 was almost always salutary to the Sick.

A P R I L.

New Moon the 9th. Full Moon the 24th.

In the Beginning of *April* the Weather was
 cold and dry, the Wind easterly, and on the
 4th there was a severe Frost; after the 7th the
 Wind was changeable, but for the most Part
 either south-easterly or north-easterly; from
 the 19th to the 22d we had a rainy south Wind,
 and very great Fogs at the Close of the Month.

Rain $\frac{''}{5}$. $\frac{'}{7}$. 8. 11. 16. 17. $\frac{'''}{19}$. $\frac{'}{20}$. $\frac{'}{21}$. $\frac{'}{22}$.
 $\frac{'}{24}$. 26. = 1.960.
 Dig. Dec.

A Storm the 19th, at Night, S. S. E. 4^x.—
 The 20th, a. m. S. 4, but a violent one at
 Midnight, S. 4^x.

* *Essay on Fevers*, Page 217.

† Ditto, Page 186.

Greatest Height of	8	27, 30.2, N. b E. 1.	} Mean Height
Least	—	20, 28.9, S. 4.	
Coldest Day	4, 62,	E. b N. 1.	} Mean Height 48 $\frac{1.8}{29}$.
Warmest	29, 36,	W. N. W. 1.	

A great many Small-pox: The Measles epidemical: At the Going-off of the Measles there very often came on a very violent Cough, and peripneumonic Complaints; not uncommonly also a Spitting of Blood; sometimes too a very profuse and obstinate Diarrhœa, which carried off several Children, and sometimes even grown Persons.

Quinsies and Pleurifies very rife: Many true Peripneumonies and Pleuro-pneumonies, and those indeed frequently fatal, especially when the Quinsy was suddenly changed into a pulmonary Disorder. — There was now also up and down an unusual Kind of Pleurisy (if it may be so called) in which a most acute Pain raged between the Shoulder-Blades, which extended itself home to the * Sternum, with an Oppression on the Breast and Difficulty of Breathing; sometimes also it was exceeding tormenting all thro' the Back-Bone and Hypochondria, so that the Patients could scarcely cough or breathe, nay, they sometimes used their utmost Efforts to suppress their Cough, upon the Account of the Violence of the Pain; now and then they are desirous of being lifted up in their Beds, but

* *Essay on Fevers*, Page 239.

presently crying out, being uneasy and altogether impotent, they fall back again; in this Manner did a continual Restlessness, terrible Anxiety, and the most violent racking Pains, or, to use an *Hippocratic* Term, a most violent *Δυσφορία*, oppress them. Plagued too with an incessant short Cough, they expectorated nothing at all, or else frothy and altogether crude Matter; sometimes a Singultus came on, which was shortly after followed by an unequal, cold, foetid Sweat, and very soon by Death. Indeed this was a very acute Fever, and killed within a very few Days: I knew a robust young Man seized, and carried off on the fourth Day in a Fit of Coughing, by a violent Convulsion of the Nerves. — Is not this the very same Disorder which *Hippocrates* calls Πλευρίτιν ἐν νῶτι, or Νωτιάδα*, namely, an Inflammation of the *Diaphragm*, or *Mediastinum*. The Term *Paraphrenitis*, used by the Moderns to signify an Inflammation of the Diaphragm, is never to be met with in *Hippocrates*.

In such Cases the chief Security is in timely Bleeding; presently after *Nitre* and *Sperma Ceti*,

* It is thus described, Lib 2, *de Morb.* Sect. 54, Edit. *Linden*. Πίγος, καὶ πυρετός, καὶ βήξ καὶ δύσπνοια λαμβάνει — πόνει μάλιστα τὸ Μετάφρενον, καὶ τοῦς βοιβάνας. — Again, Lib. 3, Sect. 21. Τὸν Νῶτον ὀδυνᾷται, ὡς πληγῆς καὶ γένει, καὶ ἀναπνεῖ ἀθρόον — ὀδύναί δὲ ὀξείαι διὰ τῆς ῥάχιος εἰς τὰ στήθεα, καὶ εἰς τὸν βοιβάνα τείνουσι.

with a little *Camphor*. prove serviceable : Besides these, *new Oil of Linseed*, or *Oil of Almonds*, with *Elix. Asthmatic.* and *Diacodium*, seem to be very useful after Bleeding, in order to relax the smaller Vessels, which are too much constricted, and to alleviate the Pain. — Such pleuritic or peripneumonic Patients, however, as freely expectorate a large Quantity of yellowish Matter moderately tinged with Blood, are sure of a Recovery, and that often within a few Days ; — scarcely any one of those Persons ever fails. — Nevertheless it is quite the contrary where People cough up crude, thin, frothy, or mere bloody, sanious, or black Stuff ; since, those People being harrassed by an incessant Cough, find very little if any Relief, and at length, in less than eleven Days, sink beneath the Disease, becoming either altogether purulent or consumptive. Watery Swellings in the Feet, a Feveret towards Night, a dry short Cough, and a Difficulty of Breathing foretel all this, which, after pulmonary Fevers, was indeed at this Time much more frequent than usual.

Therefore there was another and another Handle for Mistake now afforded, in the Treatment of those Diseases which were rise at present ; for some, in the very Beginning of the Disorder, were seized with profuse Sweats, others with a very large, serous Diarrhœa. — This you would imagine should give a Turn to the Dis-

ease:—By no Means, however; since, the thinner Part of the Blood being exhausted, the Humours remained more thick, more disordered, and acrimonious.—I acknowledge indeed that I very lately saw two or three *mesenteric* Fevers (to express myself in the Manner of *Baglivi*) determined by a Flux of the Bowels; but then there was a Tension, Pain, and Load under the *Diaphragm*: These Cases however were hastily adjudged to be epidemical, peripneumonic ones, and, in my Cure of one of them, a Surgeon-Apothecary was very greatly amazed at my prescribing a cathartic Draught, and omitting Bleeding; but this I did very successfully.

There is moreover great Caution necessary to be used in treating a particular Kind of pulmonic Disorder, which now and then made its Appearance: This came on so slowly, and was attended with so little Pain, at the same Time that there was a very great Oppression upon the Spirits, that People scarcely complained of any Illness, before that it was all over with them; and yet timely Applications, such as frequent Blistering, gentle Purges, and mild Emetics; and, besides these, proper Diluents and moderate Detergents, amongst which mustard-seed Whey claims the chief Place; had easily preserved them.—I shall add this by the Bye, that Blood is seldom drawn off in this Disease with
any

any Advantage, unless it be by Cupping, and in the very Beginning.

M A Y.

New Moon the 9th. Full Moon the 23d.

The Weather in the Beginning of this Month was very fair and warm, but afterwards colder, some Rain falling. From the 11th to the 18th the Atmosphere was again calm and warm, the Wind being east, and in the mean Time very great Dews. — From this Time there was frequently Rain to the very End, it blowing south-westerly from the 26th to the 31st.

						<u>“</u>	<u>“</u>	<u>“</u>		
Rain	4.	5.	7.	12.	17.	19.	20.	21.	25.	27.
<u>‘</u>		<u>‘</u>								
29.	30.	31.	=	1.760.						

Dig. Dec.

Lightning without Thunder the 16th and 17th, at Night.—Lightning with Thunder the 19th, p. m.—Violent Thunder and Lightning the 25th, p. m.

Greatest Height of	§	5,	29.9,	N.W.	b N. 1.	} Mean Height
Least	——	31,	29.0,	S.W.	2.	
						29.4 $\frac{2}{3}$.
Coldest Day	6,	43,	S.E.	b E. 2.	} Mean Height	30 $\frac{2}{3}$.
Warmest	15,	19,	N.N.E.	1.		

The Small-pox epidemic, and the Measles very rife.—Some bilious Fevers, and very dangerous; the Face was sometimes disfigured, even in Peripneumonies.—Dysenteries were common, even those which were bloody.—Se-

less a very violent Cough, and sometimes a very strong Peripneumony also, accompanied them:

There were also a great many Small-pox; those however were generally favourable, notwithstanding the Measles were so fatal.—Pleurisies and Peripneumonies up and down, and some Dysenteries. Ophthalmies and Defluxions on the Eyes were now very common.

J U L Y.

New Moon the 7th. Full Moon the 21st.

This Month was rainy, and one would have thought it to have been rather *December* than *July*. The Wind in general was westerly, inclining to the South, and often rainy; the Atmosphere in the mean Time was cloudy and very moist.—All Kinds of Fruit were crude and quite insipid.—Myriads of Snails every-where, but scarce one Butterfly.—The Branches and Leaves of all those Trees, which had a Sea-Aspect, were black, and appeared as burned up.

Rain	$\frac{''' }{1}$	$\frac{''' }{2}$	$\frac{''' }{5}$	$\frac{''' }{6}$	$\frac{'' }{9}$	$\frac{'' }{10}$	$\frac{'' }{14-16}$	$\frac{'' }{18}$	$\frac{'' }{19}$	$\frac{'' }{20}$
	$\frac{' }{21}$	$\frac{' }{22}$	$\frac{' }{23-24}$	$\frac{' }{25}$	$\frac{' }{26}$	$\frac{' }{28}$	$\frac{' }{29}$	$\frac{' }{30}$	Dig. Dec.	
										= 3.604.

Thunder and Lightning the 5th, p. m.—Several Fulgurations the 18th at Night.—A slight Storm the 18th at Night, S. S. E. 4_r.—Hot Days the 15th, 16th, 17th, and 18th.

Greatest Height of ☿	8, 29.9, W. 1.	} Mean Height
Least	19, 29.2, S.W. 3x.	
Coldest Day	24, 38, W. bS. 3.	} Mean Height 31 $\frac{18}{15}$.
Warmest	17, 13, S. 1.	

The Small-pox were now very epidemic, and also more fatal, as being frequently confluent, pitted, and black; often crude, watery, and running abroad; sometimes also they occasioned terrible Ulcers in the Fauces, and a prodigious Flux of acrid Spittle. — The Measles still prevailed.

Several Persons were tormented with Ophthalmies, and very great and sharp Rheums in the Eyes, and also with the Tooth-ach: In each of those, frequent Cathartics were more serviceable than Bleeding. — Numbers were afflicted with a violent Defluxion on the Lungs, which threw several Persons into a Consumption. — Several Rheumatisms and Pleurisies in the Beginning of the Month, and also sometimes Peripneumonies with Petechiæ.

Not only the Small-pox, but almost every other Disorder, was now of a worse Kind than during the Spring. — Might not this be owing to the cold and moist Weather's shutting up the Pores of the Skin, and by that Means checking the Perspiration, from whence was occasioned a ferous Colluvies, and that perhaps the more acrid, as the immoderate Heat of the Sun, during *May*, had torrefied the Bile and the Blood; and

and which moreover raised from the Earth that immense Quantity of Vapours, which we saw, in the Months of *June* and *July*, falling in Rain ?

A terrible Kind of Scurvy now raged amongst the Sailors, especially amongst those that *Martin*, Admiral of the Western Fleet, returned with, very great Numbers of whom were plagued with foul, livid, sordid, and very fungous Ulcers. Indeed it was really surprising, and very rare to see, in how short a Time spongy Flesh, of the Fungus Kind, came on upon those Ulcers, altho' they had just before been pared off with a Scalpel-Knife, and that too to an amazing Quantity. — Nor is the scorbutic Contagion alone merely of itself so very afflicting to those wretched but truly useful People, but it renders them also exceeding susceptible of every other Disorder which is occasioned by a Corruption of the Humours, such as putrid, malignant, and *petechial* Fevers, the very worst Kind of Small-pox, bloody Dysenteries, Hæmorrhages, &c. — To those worthy Persons those Diseases were infinitely more fatal than all the Noise and Thunder of the War.

A U G U S T.

New Moon the 5th. Full Moon the 19th.

By the Favour of all-gracious Heaven the Sun-shine, so long wished for, at length returned;

ed, which occasioned an happy Harvest, and exceeding good Corn. The Wind in the Beginning was northerly, but after the 11th it veered to the West; however from the 13d it blew again from the North, to the End; frequently a Calm intervened; seldom a south-west Wind; the Atmosphere nevertheless was frequently cloudy and moist: There were also very often great Dews.

Rain 8. 14. 15. $\frac{11}{16}$. 18. $\frac{11}{24}$. 25. $\frac{1}{26}$. 30. 31.
 Dig. Dec.
 = 0.846.

Thunder and Lightning the 24th, early in the Morning.

Greatest Height of	8	28, 30.0, N. N. E. 1.	} Mean Height
Least	—	16, 29.5, S. W. 3x.	
Coldest Day	27, 36, N. 1.	} Mean Height 30 $\frac{1}{10}$.	
Warmest	3, 24, N. 1.		

The Small-pox were as yet epidemic, some small, black, malignant, and that now frequently with a prodigious Flux of the Bowels. Very terrible Pains of the Teeth, and Ophthalmies, were still common. Otherwise very few Disorders.

The Grasshoppers at length chirp merrily, the Butterflies at length revive also. Vast Numbers of Hazle-Nuts.

S E P T E M B E R.

New Moon the 4th. Full Moon the 18th.

The Atmosphere all this Month was very moist, and sometimes cold; in the Beginning the Wind was frequently south-westerly, often north-westerly, in the Middle of the Month north-easterly, which rendered the Atmosphere much drier and colder, insomuch that on the 14th and 21st there was Ice.

Rain	$\frac{''}{2}$	$\frac{'}{4}$	$\frac{'}{5}$	$\frac{'}{7}$	$\frac{'}{9}$	10.	$\frac{'}{12}$	15.	16.	18.	19.	
	$\frac{''}{22}$	23.	24.	$\frac{'''}{26}$	$\frac{'}{27}$	$\frac{'''}{29}$	30	Dig. Dec.				
								= 3.178.				

A Storm the 5th, p. m. S. W. 4x. — The 29th, p. m. S.W. b S. 4.

Greatest Height of ☽	14, 30.1, N. b E. 1.	} Mean Height
Least	29, 29.0, S.W. b S. 4.	
		29.6 $\frac{6}{100}$.
Coldest Day	21, 54, N. b E. 2.	} Mean Height 39 $\frac{2}{100}$.
Warmest	9, 33, W. 2.	

The Small-pox still raged: Ophthalmies, and in general those humid, were very rife:—Swellings of the Fauces, Head, and Neck, with a violent Tooth-ach, plagued vast Numbers; there were also several Defluxions and Coughs:—Compound miliary Fevers (that is, such where the red Pustules are mixed with whitish Pimples) were very rife about *Totness* and in the *southern Parts of Devon*.

O C T O.

OCTOBER.

New Moon the 3d. Full Moon the 18th.

A cold *October* followed, a north-easterly Wind setting-in about the 4th Day, which, exclusive of the 19th Day, continued home to the 23d: Hence the Atmosphere was dry, but generally cold, sometimes indeed there was a smart Frost: Towards the End a south-easterly Wind prevailed.

Rain $\frac{1}{1}$. 2. $\frac{11}{19}$. 21. $\frac{1111}{23}$. $\frac{11}{24}$. $\frac{1}{25}$. $\frac{1}{26}$. 28. —

Snow and Hail $\frac{1}{22}$. = 2.238. Dig. Dec.

A Storm the 1st, p. m. S. W. 4. — The 23d, from 11 a. m. to 4 p. m. S. W. 4, altho' in the Morning there was a sharp Frost, and the Wind N. E. 1. — The 26th, a. m. S. W. 4. — The Wind Circius very violent the 25th, p. m. — Lightning the 23d, at Night. — A. B. the 7th, N. N. E. 1.

Greatest Height of ☿ 6, 30.4, N. E. 1. } Mean Height
Least ——— 24, 28.8, S. S. W. 3. } 29.8 $\frac{1}{2}$ $\frac{9}{8}$.

Coldest Day 23, 64, N. E. 1. } Mean Height 51 $\frac{1}{2}$ $\frac{2}{8}$.
Warmest 1, 42, S. W. 4x. }

The Small-pox were still epidemical, but somewhat more mild: Numbers were yet plagued with Ophthalmies; a great many also had very acute Pains in the Teeth, Ears, with a Swelling of the Fauces and Glands of the Neck: Very
violent

violent Coughs up and down, and not a few Persons laboured under Peripneumonies and Rheumatisms.

N O V E M B E R.

New Moon the 2d. Full Moon the 17th.

From the very Beginning of the Month to the 18th the Wind was either north-easterly or easterly, and that very cold; in the mean Time the Atmosphere was frequently dark, and now and then some Rain fell: After the 19th we had sometimes a turbulent southerly Wind, sometimes a northerly.

Rain $\frac{1}{1}$. $\frac{1}{2}$. 8. $\frac{11}{10}$. $\frac{11}{11}$. $\frac{11}{12}$. $\frac{1}{13}$. 14. $\frac{1}{18}$. $\frac{11}{20}$.
 $\frac{11}{21}$. 23. 24. $\frac{11}{25}$. 26. $\frac{1}{27}$. 29. $\frac{1}{30}$. — Snow and
 Dig. Dec.
 Hail 19. 22. = 3.306.

A Storm the 20th, at Night, S. 4. — The 21st, in the Morning, S. 4x. — The 22d, in the Evening, N.W. 4. — The 30th, p. m. S. S. E. 4. — A very thick Fog the 8th, and a Calm.

Greatest Height of	8	4, 30.2, E. N. E. 2x.	}	Mean Height
Least	—	21, 28.6, S. S. W. 3x.		29.5 $\frac{26}{100}$.
Coldest Day	7,	68, E. N. E. 2x.	}	Mean Height 58 $\frac{4}{100}$.
Warmest	21,	50.		

The Small-pox were now generally of a favourable Kind. — Very violent convulsive Coughs every-where among the Children; a great many

also,

also, and those very violent, amongst grown Persons, with Swellings of the Head, Neck, Fauces, and frequently a violent Tooth-ach. Ophthalmies up and down, as also mucous Quinsies. — Several Persons laboured under obstinate Fits of the Rheumatism and Gout.

A cold and moist autumnal Season commonly produces a serous Colluvies, which at one Time rushes to the Head and Breast, at another falls upon the Limbs and Intestines, from whence are occasioned Catarrhs, Coughs, Rheumatisms, Gout, Diarrhœas, Dysenteries, which at this Time were so common. — If the Summer however was warmer than usual, and succeeded by a sudden Cold, People who were not upon their Guard suffered very severely from thence.

D E C E M B E R.

New Moon the 1st. Full Moon the 16th.

New Moon the 31st.

It rained frequently this Month, as is usual, the Atmosphere however was very heavy and humid: The Wind was always south-west, home to the 22d, afterwards south-easterly, or a very cold north-easterly, Wind to the very End. The Density of the Atmosphere raised the Barometer to a great Height.

Rain

Rain $\frac{1}{1}$. $\frac{2}{2}$. 3—5. 7—9. $\frac{1}{11}$. $\frac{2}{12}$. $\frac{1}{13}$. 14—16.
 $\frac{1}{17}$. 19. 21. $\frac{1}{24}$. $\frac{3}{26}$. 27. = 2.780. Dig. Dec.

A great Storm the 12th, in the Evening,
 S.W.bW. 4^x.—A.B. 28, H. 7, p. m. E. N. E. 2.

Greatest Height of	8' 22, 30.3, N. N. W. 1.	} Mean Height
Least	12, 29.0.	
Coldest Day	31, 76, N. E. b E. 2.	} Mean Height 56 $\frac{1}{3}$.
Warmest	5, 50, S. W. 2.	

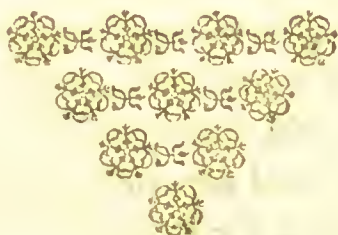
Peripneumonies up and down : Several Ophthalmies : Coughs, and those very violent, every - where, but those mostly plagued the Children, who were frequently seized with Convulsions : Numbers were tormented with a very obstinate Gout and Rheumatism.

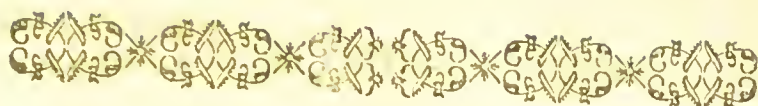
The Small - pox still raged very much, and were now much more fatal, as being of the confluent, crude, livid, watery Kind : Some spread abroad greatly, and were quite black.—Nature commonly sought for Relief either by Expectoration or by Stool.—A plentiful Discharge of Urine, with a Sediment in it, was always beneficial. — For this Reason I almost always give, in the Decline of the Fever, gentle Eccoprotics, with Diuretics : But, in the Increase of the Disease, or rather as it comes on to its State, I order such Medicines as may promote a Concoction of the Humours, of which Kind are *Lap. Contrayerv. Myrrh, Mosch. Mithridat. The-*

riac. Andromach. &c. nor indeed should I pass over unnoticed the excellent Qualities of Figs and Vetches in the Maturation of the Small-pox, so highly esteemed by the *Arabians*, from whom we have had the first History of this Disease.— Nay, I frequently use *Coffee* itself to this Purpose, with great Success.

The whole Quantity of Rain for 1746 was
Dig. Dec.

= 31.990.





OF THE

A I R,


AND

EPIDEMIC DISEASES,

For the YEAR 1747.

J A N U A R Y.

Full Moon the 15th. New Moon the 29th.

 HIS Year began with a very sharp Frost, and a north-easterly Wind; after the 5th we had a south-easterly Wind, and some Rain, presently after a constant south-westerly Wind, and a melancholy and wet Season: The Atmosphere was very moist, scarcely any Sun, and Rain more than enough.

Rain $\frac{1}{5}$. 6. $\frac{1}{8}$. $\frac{1}{9}$. $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{13}$. $\frac{1}{14}$. $\frac{1}{15}$. $\frac{1}{16}$.

$\frac{''}{18}$. $\frac{''}{19}$. 20 — $\frac{''}{21}$. $\frac{''' }{22}$. 23. $\frac{''}{25}$. $\frac{''}{26}$. 27. $\frac{''}{28}$. 30.

31. ——— Snow 5. ——— Hail $\frac{1}{20}$. = 4.616. Dig. Dec.

A Storm the 15th, at Night, S. 4. — A flight
A. B. the 2d, H. 10, p. m. E. N. E. 2.

Greatest Height of ☿ 1, 30.2, E. N. E. 3x. } Mean Height
Least ——— 16, 28.8, S. S. W. 3x. } 29.4.

Coldest Day 1, 78. }
Warmest 30, 50, S. b E. 3. } Mean Height 57.

Several Small-pox : Numbers laboured under a catarrhal Fever :—Innumerable Coughs, and frequently those violent : Rheumatisms also, and violent Tooth-achs, with Tumours of the Head, Neck, and Fauces, were very common. — A very bad convulsive Cough raged among the Children, and carried off Numbers : They very frequently brought up Blood, and had sometimes an high Fever with it. Such Persons absolutely required Bleeding, sometimes twice or thrice indeed, altho' but two or three Years old ; a regular Course of Diet is next to be entered upon, and moreover the Ventricle and Intestines are to be gently purged ; which being done, a Decoction of the *Peruvian Bark* with *Colt's-Foot* and *Balsam of Tolu*, and the Application of one or two Blisters, removes the Disease ; however it is absolutely expedient to free the Respiration and Expectoration by a Solution of Gum. Ammoniac. in the Juice of *Millepedes* and *Hyssop* - water. There were
several

several nevertheless who from hence fell into the Rickets.—The Itch infested Numbers, amongst the lower Kind of People and the Sailors.

F E B R U A R Y.

Full Moon the 14th. New Moon the 28th.

In the Beginning of the Month the Wind was southerly, and now and then it between Whiles blew north-westerly : It rained however every Day home to the 15th, and the Atmosphere was very moist ; then a dry and very cold north-easterly Wind set in ; but at the Conclusion a violent and rainy south-easterly.

Rain $\frac{''}{1}$. $\frac{'}{2}$. $\frac{''}{3}$. 4. $\frac{'}{5}$. 6. $\frac{'}{7}$. $\frac{'}{8}$. 9. $\frac{'}{10}$. $\frac{'}{11}$.
 $\frac{'}{13}$. $\frac{''}{14}$. 15. 25. 26. 27. $\frac{''}{28}$. — Snow 16.
 Dig. Dec.
 17. = 2.288,

A Storm the 5th, p. m. W. S. W. 4.—The 8th, a. m. S. S. W. 4.—The 13th, at Night, S. W. 4_x.

Greatest Height of ☽ 23, 30.2, E. N. E. 1^x. } Mean Height
 Least ——— 14, 29.0, S. W. 3. } 29.6.
 Coldest Day 18, 73, E. N. E. 2. } Mean Height 58 $\frac{8}{25}$.
 Warmest 4, 50, S. W. b W. 2^x. }

The Small-pox were still rife : Some putrid nervous, slow Fevers : Terrible Fits of the Asthma here and there : Coughs also raged greatly : Several Persons were seized either with a Pleurisy or Peripneumony ; several also with

an excruciating Rheumatism. The Itch was very common every-where. A Kind of a bilious Colic at this Time tormented a great many Persons, who were oppressed by a very violent Pain in the Stomach and continual Reachings ; at one Time they were too laxative, at another exceedingly costive ; nor was the violent Stricture of the Intestines, yielding to the Power of the strongest Cathartics, removed before Bleeding and an emollient Fomentation :—An exceeding acute, obstinate Pain, occasioned generally by the Induration of the Excrement, which was compacted together at the End of the *Ileum*, and the Beginning of the Colon very often fixed itself in the very Bottom of the right Hypochondrium.—Nor was this Pain scarcely ever relieved but by a relaxing Fomentation and frequent Clysters, which softened the Fæces ; Care should be taken, however, that the Fomentations are not too warm.

M A R C H.

Full Moon the 15th. New Moon the 29th.

The Wind, from the very Beginning of *March* home almost to the 23d, was easterly, but generally inclining to the North : This rendered the Atmosphere dry and cold, and often beautiful ; afterwards there set in a south-westerly Wind, and at the Close a north-easterly.

Rain

Rain 1. $\frac{1}{9}$. 10. $\frac{11}{19}$. $\frac{1}{23}$. 24. $\frac{1}{25}$. $\frac{11}{26}$. 27.—

Snow 8. 9. — Hail 10. 20. = 1.700.
Dig. Dec.

A Storm the 26th, at Night, S.W. 4x.—
A. B. the 22d, H. 9, p.m. N.b E. 1.—From
the 12th to the 18th there were every Day
most beautiful Clouds of a scarlet Colour.

Greatest Height of ☿ 14, 30.4, E. N. E. 1. } Mean Height
Least ————— 20, 28.9, N. b E. 1x. } 29.7 $\frac{2}{28}$.

Coldest Day 8, 66, N. N. E. 1x. } Mean Height 58 $\frac{16}{28}$.
Warmest 30, 46, N. 1.

The Small-pox here and there: A filthy
Itch every-where: Numbers were oppressed
very greatly by a violent Asthma, and several
by a very violent Cough.

Several Persons died, who were carried off
by an *Apoplexy** or an *Hemiplegy*.—This is
what *Cole*, de Apoplexiâ, remarks often hap-
pens after the long Continuance of a cold Sea-
son, which is indeed confirmed by Experience:
May not this be owing to a too great Conden-
sation of the Blood? Or is it else not from the
vast Weight of the Atmosphere's compressing
the whole Frame of the Body, by which Means
too large a Quantity of the Blood is driven up
into the Brain, the Skull sustaining the Pressure
of the Atmosphere? At such a Season Persons

* *Ramazzini* enumerates Apoplexies among the reigning
Diseases in a very cold and dry Atmosphere.—See *Con-
stitut. Epidemic*, 1691, Sect. 3.

with a large Head, square-set Body, and short Necks, are to take great Care of themselves : They must live sparingly, use mild Purges, and guard against the approaching Disease.

Pleurisies and Peripneumonies were very common ; at this Time the Blood was always exceedingly dense, and covered over with a tenacious Glue ; there was a violent Cough, and nevertheless a free Expectoration, and in general moderately tinged with Blood ; where however nothing at all was pumped up it was a very bad Sign, nor indeed was it a much better when the Matter brought up was small, knotty, and only frothy. I have experienced in these Cases very advantageous Effects from such Medicines as are composed of *Figs, Honey, Oil, Nitre, and Sperma Ceti*, as moreover of the liberal Use of an emollient Drink, such as as is called the *Pectoral Decoction*, or Whey, in which are infused *Dandelion Roots* ; which have a very great Power in dissolving the Lentor of the Blood, especially if there be boiled in it at the same Time * *Grass-Roots* and a good deal of *Eryngo*. —Should you want any Thing else of the same

* Even the very Herdsmen themselves are acquainted with the deterging Power of Grass ; for, by observing the Oxen's Dung, they remark, that, upon the Oxen's feeding upon new Grass, and which, having been a long Time before kept in the Stables, became languid and jaundiced, to void the Obstructions, and almost stony Incrustations in their Dung.

Kind, *Ground-Ivy, Colt's-Foot, Maiden-Hair, Elecampane, Hyssop, Penny-Royal, and the Flowers of the wild Poppy.*—Those indeed are useful, and by no Means despicable Remedies, and were the native Physick of our Sires and Grand-fires. At present however the petty Fribbles of our Days, and the arrogant Coxcombs, call aloud for the *India Tea, the Sarfam, Chinam, Ginseng,* and I know not what else.—But avaunt, you most delicate Gentry, the most scandalous Progeny of a more iniquitous Age!

A P R I L.

Full Moon the 14th. New Moon the 28th.

During this Month likewise the Wind was generally easterly, one While veering to the South, at another Time to the North; the Atmosphere in the mean Time was sufficiently rare: From the 13th however to the 17th the Wind was either south-westerly or southerly, and very great Fogs.—A Calm the 22d.

Rain 5. $\frac{1}{8}$. $\frac{1}{13}$. 14. 16. $\frac{1}{17}$. 18. $\frac{1}{23}$. $\frac{1}{24}$. $\frac{1}{26}$.

Dig. Dec.

28. = 3.100.

Greatest Height of	8	1, 30.2, E. 1.	} Mean Height
Least	—	24, 29.2, E. b N. 1.	
			29.7 $\frac{3}{8}$.
Coldest Day	11, 55,	N. E. b N. 1 ^x .	} Mean Height 43 $\frac{2}{3}$.
Warmest	31, 36,	S. S. E. 1.	

There were now few Small-pox: The Pleurisy and Peripneumony still very rife, from
which

which some fell into a Vomica of the Lungs, and hence became consumptive: This indeed happened chiefly to those Persons who expectorated very little or nothing before the 5th or 7th Day, and then what was muddy, sweetish, or foetid Matter. Several violent asthmatic Coughs, and several Persons died consumptive.

A slow putrid Fever was now very common, and stuck by the Sick a long Time: The Breast and Præcordia were greatly oppressed from the very Beginning; there was a short little Cough, a Soreness in the Fauces, frequent Vomitings, and a Pain in the Head.

M A Y.

Full Moon the 13th. New Moon the 28th.

In the Beginning of the Month the Wind was north-easterly, from the 8th to the 20th often north-westerly, more frequently south-westerly, then south-easterly to the 24th, afterwards north-westerly again: The Atmosphere in the Beginning of the Month was very dry.

Rain 6. 10. 11. 12. 14. 15. 17. 19. 21. 22.

23. 25. 30. 31. = 2.108.

Greatest Height of ☉ 7, 30.1, N. N. E. 1°. } Mean Height
Least ————— 22, 29.2, S. S. E. 2°. } 29.5 $\frac{1}{3}$.

Coldest Day 1, 42, E. N. E. 1°. } Mean Height 35 $\frac{1}{4}$.
Warmest 24, 28, S. S. E. 1. }

In the Beginning of the Month a vast Number of Caterpillars, which devoured every Thing, were washed away by the Rains and killed. The slow, putrid Fever still attacked Numbers: Ophthalmies and some Rheumatisms: Pulmonary Diseases also here and there: And Numbers consumptive.

J U N E.

Full Moon the 11th. New Moon the 26th.

The Barometer was low all *June*, much Rain, moist Atmosphere, the Wind quite fluctuating, in general however it was southerly. From the 17th to the 22d it was north-easterly.

Rain $\frac{1}{1}$. 3. 4. $\frac{1}{5}$. $\frac{1}{6}$. 9. 11. 14. 16. $\frac{1}{24}$. $\frac{1}{25}$.
 26. $\frac{1}{27}$. $\frac{1}{28}$. 29. — Hail 9. = 3.372. Dig. Dec.

Thunder and Lightning at a Distance the 11th at Night.

Greatest Height of ☉ 21, 29.9, N.N.E. 1°. } Mean Height
 Least ————— 25, 29.1, S.W.bW.2. } 29.4 $\frac{2}{3}$.

Coldest Day 1, 42, N. 1. } Mean Height 32 $\frac{8}{30}$.
 Warmest 12, 24, S. 1. }

The pulmonary Fever was not now so common, but Numbers were plagued with Coughs and the Rheumatism. This rainy and unfavourable Season greatly hurted such as were consumptive.

* See *De Aëre & Morbis Epidemic*, Vol. I, Page 52.

The * slow, putrid Fever hitherto raged very much, and proved fatal to Numbers. — In the Beginning, there was a Pain in the Sinciput, Occiput, the Back, and presently the Præcordia ; there was moreover also a nasty bitter Taste in the Mouth, a Sickness, Vomiting, a very foul Tongue, and at length intirely black, and this moreover frequently attended with a Singultus : At the State of the Disease, suppose the sixth or seventh Day, the Patients almost always grew delirious, and in a very short Time afterwards they died soporose : There were seldom wanting Tremors and a Convulsion of the Tendons.—The Urine was at one Time thick, small in Quantity, reddish, or black ; at another, very crude and limpid : There was often a Yellowness in the Skin, but much oftener in the Whites of the Eyes.—The Abdomen was sometimes very much swoln, and indurated ; in which Case a Looseness, whether spontaneous or procured by Art, greatly relieved the Sick, since this brought off a large Quantity of bilious and sometimes quite black Matter.—Indeed this happened chiefly to such who had no Emetic given them in the Beginning, which this Fever most certainly required. — Besides, after the

* This Fever should more properly be called the bilious, or mesenteric ; for, altho' it generally drags on the Patient a long Time, yet it discovers Tokens of a very acrid and abundant Bile.

Vomiting

Vomiting a plentiful, equal Sweat generally broke forth, and a great Itching of the Skin with Pustules generally came on at the Departure of the Disease, and that more especially if the Bowels are lax, and soon after there is a Deposition of a large Quantity of turbid, brown Urine. Indeed sometimes a Sweat removes this Fever, sometimes a Diarrhœa; to know which of those it requires, I observe the following Rules: If the Patient is troubled with an Itching, and as it were a Biting in the Skin, especially if there is an Eruption of red Pimples, I then encounter the Disorder with moderate *Diaphoretics*; if with Belchings, Flatus, and a Swelling of the Abdomen, with gentle *Cathartics*—*Pulv. Contrayerv. C. Julep. Camphorat.* with *Vinegar* and a little *Theriac. Andromach.* are of great Service in producing a Sweat; and for procuring a Stool *Rhabar. Mann. Sal. Mirab. Glauber. Crem. Tart.* — All aloetic Preparations were pernicious.—In the mean While, whether I used Purgatives or Sudorifics, I prescribed drinking freely some diluting demulcent Liquor, to which, for the Sake of promoting a Discharge of Urine, I moreover added some *Sp. Nitri dulc. Sal. succin. Nitre, &c.* — There was scarcely a more certain Sign of Health than a large Discharge of muddy, *hypostatic* Urine on the eleventh or fourteenth Day.

JULY.

J U L Y.

Full Moon the 10th. New Moon the 26th.

The Rains ceased on the 5th of *July*, and a much more pleasant Season succeeded; the Sun also shone exceeding warm, the Wind being at first north-westerly, then easterly, and bye-and-bye a north-easterly Wind intervening, and now and then a Calm: Towards the End a north-easterly Wind prevailed.

Rain 1. $\frac{1}{2}$. $\frac{1}{3}$. 5. $\frac{1}{16}$. 28. $\frac{1}{29}$. = 1.142. Dig. Dec.

Greatest Height of ☿ 21, 29.9, E. N. E. 2x. } Mean Height
Least ————— 3, 29.2, S. W. 3. } 29.6 $\frac{2}{3}$ 1.

Coldest Day 4, 34, W. N. W. 2x. } Mean Height 24.
Warmest 18, 13, E. N. E. 1.

Some putrid and slow Fevers still: Some Peripneumonies also, chiefly of the bastard Kind: Rheumatisms here and there, and several humid Ophthalmies. — From the Time however that the Weather became fair and warm, very few Disorders appeared, as is generally the Case at this Season of the Year, provided only that there be a clear, bright * Sky.

A U G U S T.

Full Moon the 9th. New Moon the 24th.

The Station of the Barometer was but a little elevated during this Month, but the Atmosphere

* *Hippocr.* Aphorism. 15, Sect. 3.

was very dry and exceeding warm ; the Wind was very often easterly, frequently north-easterly, often north-westerly, and very seldom south-westerly.

Rain 2. 3. $\frac{4}{15}$. 16. 17. 25. 28. = 0.564. Dig. Dec.

There were very often exceeding great Dews : Thunder and Lightning at a Distance the 25th.

Innumerable Flies, Wasps, and Butterflies of all Kinds ; an immense Quantity also of Caterpillars, and the Grasshoppers now everywhere chirped most merrily. All the Rivulets, and almost every Spring, were now dried up by the excessive Heat.

Greatest Height of ☽	30, 29.9, N.N.E. 1.	} Mean Height
Least	15, 29.2, W. b S. 2.	
Coldest Day	16, 30, N.W. 2.	} Mean Height 21 $\frac{1}{3}$.
Warmest	23, 12, N.N.E. 1.	

Very few Disorders at present, nevertheless several Persons were seized with a Diarrhœa, nay, and that frequently a very profuse one. Numbers were plagued with Ophthalmies, or Defluxions on the Eyes : Several had very large Discharges from the Mouth, some from the Nostrils, and more from the *hemorrhoidal* Veins : The Women had most abundant menstrual Discharges :—All this owing to too great a Rarefaction of the Blood.

S E P T E M B E R.

Full Moon the 7th. New Moon the 23d

The Wind during this Month was generally westerly, veering at one Time to the South, another Time to the North; sometimes also a north-easterly Wind intervened. The Atmosphere was often dry and thin, sometimes also very cloudy. In the Beginning it was warm.

Rain $\frac{''}{5}$. $\frac{'}{6}$. 7. 10. 12. $\frac{'}{14}$. $\frac{'''}{15}$. $\frac{'}{16}$. $\frac{'}{17}$. 20.
 $\frac{''}{21}$. $\frac{''}{25}$. $\frac{''}{27}$. 28. 30. = 2.516. Dig. Dec.

There were frequently prodigious Dews, nay, sometimes even Hoar-Frosts.

Greatest Height of ☿	24, 30.1, N. b E. 1.	} Mean Height
Least	16, 29.0, W. 1 ^x .	
Coldest Day	19, 46, N. N. W. 1 ^x .	} Mean Height 38 $\frac{9}{28}$.
Warmest	4, 24, a Calm.	

There was a slow, putrid Fever up and down, which was now frequently attended with the yellow Jaundice, and a great Loss of Strength, sometimes with a Swelling of the Abdomen and Feet. Gripings in the Bowels every-where tormented Numbers, several also were seized with a very violent Cholera, but more with a mucous and bilious Dysentery, and sometimes a bloody one, not uncommonly attended with a Fever; towards the End there was frequently an Eruption of biting Pustules over almost the whole

whole Body—so that almost in all Cases there seemed to prevail an acrimonious and bilious Colluvies, which was generally very happily discharged by Stool: Indeed at this Time a Laxity of the Bowels was fatal to very few Persons, altho' it sometimes continued a long Time, provided there was a proper Dilution, the Acrimony tempered, and then the Saburra of the Intestines gently purged off. At other Places however, especially amongst the People of *Bristol* and *Bath*, this Dysentery was much more fatal.

After a very warm Summer there almost constantly follow Choleras, Dysenteries, and Fluxes; for, by the long Continuance and intense Heat of the Sun, the Blood is torrefied, the * Bile is exalted, and the animal Salts become daily more acrimonious; thus the very Venom of a Viper is much more poisonous in the violent Heat of Summer than when every Thing becomes torpid from the Coldness of the Winter. When however a cold and moist Autumn succeeds this, the Skin being constipated, the acrimonious Humours rush away to the interior Parts, and by that Means generate many and various Diseases, among which are those described above.—Take Care therefore that you do not stop up such Passages as should have

* Therefore *Hippocrates* calls τὸ θεῖον χολοπαῖον. Lib. de *Humorib.* Sect. 8, Edit. *Linden*

carried off the superabundant Colluvies, which should have passed thro' the Pores of the Skin; since there is most undoubtedly a very great Communication between the Skin and the Intestines.

What I have said therefore in some Measure discovers the Method to be taken in the Cure of autumnal Diseases; for the Spring Fevers require more Bleeding, but the autumnal are rather relieved by gentle Cathartics. — Indeed the great and long-continued Heat of the Summer not only enervates the Strength of the Fibres, but it also too much dissolves the Texture of the Blood, renders the Salts more acrimonious, and the animal Oils more rancid; in a Word, it weakens the Vessels, sharpens the Humours, and generates a large Quantity of putrid Bile — and accordingly the great Father of Physick speaks thus: Τῶν δὲ Θέρεος — ἡ χολὴ αἰρίζεται ἐν τῷ Σώματι; and then adds, ἡ δὲ χολὴ τὴν Θερμὴν κατέχει τὸ Σῶμα καὶ τὸ Φθινόπωρον; and, a little lower down, ἡ δὲ μέλαινα χολὴ τοῦ Φθινοπώρου πλείστη τὴ καὶ ἰσχυροτάτη ἐστίν. *Lib. de Natur. Homin. Sect. 14, Edit. Linden.* Indeed, wherever an acrimonious and bilious Colluvies abounds, it will be exceeding proper to discharge it, either by a Vomit or a Purge, since the chief Situation of this Disorder is in the Primæ Viæ, the Viscera of the Abdomen, and the *mesaraic* Vessels. I confess indeed that the whole Mass of
Blood

Blood very often abounds with it; but even in those Circumstances Bleeding is not so much indicated, which may lessen indeed the too large Quantity of the Blood, but is incapable of correcting its Acrimony; which, as it is so by drawing off the vital Powers with the Blood, and not the Acrimony, is hurtful. Wherefore † *Hippocrates* and the ancient Physicians, where the Bile, *viz.* the bilious Acrimony, abounded, prohibited Bleeding; nor indeed can I see to what good Purpose it can serve, unless where there is a Plethora, or a very violent Inflammation: Truly I have seen in this Case very shameful and incurable Errors, and have more than once been sorry for them.

O C T O B E R.

Full Moon the 7th. New Moon the 22d.

The Barometer stood high for almost the whole Month of *October*, the Wind being very often north-easterly or north-westerly; however sometimes the Wind blew south-westerly or south-easterly; the Atmosphere was much more humid, and generally sufficiently warm.

Rain 1 — 3. $\frac{''}{4}$. 10. 14. 16. $\frac{'}{26}$. $\frac{''}{27}$. 28. 29.
 $\frac{''}{31}$. Dig. Dec.
 31. = 1.596.

† *Lib. de Humorib.* towards the End.

A slight Storm the 4th, S.W. 4x. — The 31st, p. m. S.W. 4x. — Very great Hoar-Frosts in the Middle of the Month.

Greatest Height of	8 6, 30.3, E.N.E. 1.	} Mean Height
Least	29, 29.5, S.W. b W. 3.	

Coldest Day	20, 54, E.N.E. 1.	} Mean Height 46 $\frac{4}{36}$.
Warmest	1, 38, W.S.W. 1.	

Rheumatisms here and there : Putrid Fevers common, which were frequently attended towards the Conclusion with a Jaundice. — De- fluxions and Tooth-achs molested Numbers, as also violent Coughs : — Fluxes were still com- mon : Dysenteries however not so rife. — The Small-pox now of a sudden became epidemic, and those too of a very bad Sort, and often fa- tal ; since they were small, and black, or diffu- sed with a crude Ichor to the very End ; fre- quently the Petechiæ broke out together with the Small-pox, which is an exceeding bad Sign ; sometimes the Skin itself was affected with a Mortification under the watery Pustules.

N O V E M B E R.

Full Moon the 6th. New Moon the 21st.

During this Month the Atmosphere was very dense and humid, which kept the Barometer high, altho' the Wind was much more rarely easterly than it was in the past *October* : Indeed we had frequently a north-west Wind, but not uncommonly a south-west. — At the very Con-
clusion

clusion itself a violent Tempest from the South very greatly disturbed the Barometer.

Rain $\frac{1}{1}$. 9.—11. $\frac{1}{15}$. $\frac{1}{16}$. 17. 18. $\frac{1}{20}$. 22. 23.
24. 27. $\frac{1}{29}$. $\frac{1}{30}$. — Hail 16. $\frac{\text{Dig. Dec.}}{= 2.078}$.

A Storm the 16th, at Night. — The 20th, p. m. S.W. 4.—The 29th, p. m. S.S.W. 4^x. — A great *A. B.* the 21st, H. 9, p. m. N.W. 1^x.

Greatest Height of	8 4, 30.3, N. 1.	} Mean Height
Least	30, 28.6, S.W. 3.	
Coldest Day	25, 62, N.bE. 1.	} Mean Height 50 $\frac{6}{5}$.
Warmest	10, 42, S.W.bW. 2 _x .	

The Small-pox were still epidemic, but in general much more favourable; however they were very often attended with a very large Flux of salival Matter, even in those of the distinct Kind.

A ferous Diarrhœa still plagued Numbers: Several Catarrhs and Rheumatisms, and also violent Coughs: — Not a few acute pulmonic Disorders.

D E C E M B E R.

Full Moon the 5th. New Moon the 20th.

At length the Vapours, which had been a long Time heaping up together, fell, which was attended with a very great Fall of the Barometer. During the Beginning of the Month the Wind was south-easterly, then again we had a most violent south-westerly Wind, with the

Interposition now and then of a north-west.—

This rainy and miserable Weather continued home to the 21st; the Wind then gat about to the East, and, veering about to the North, produced a very severe Winter, and a very great Rise of the Barometer.

Rain	$\frac{''' }{1.}$	$\frac{'' }{3.}$	$\frac{' }{4.}$	$\frac{''' }{5.}$	7.	8.	$\frac{''' }{9.}$	$\frac{'' }{10.}$	$\frac{''' }{11.}$	$\frac{'' }{12.}$	$\frac{'' }{13.}$
	$\frac{'' }{14.}$	$\frac{' }{15.}$	$\frac{''' }{17.}$	$\frac{' }{18.}$	$\frac{' }{19.}$	20.	24.	— Snow 2.			
Dig. Dec.											
= 6.566.											

Vast Floods in the Middle of the Month.—
The Atmosphere was exceeding dense, and by far the most humid before the 24th.—Very thick and stinking Fogs from the 20th to the 22d.—A Storm the 2d, E. S. E. 4^x.—The 9th, at Night, S. W. 4.—The 10th, S. W. 4.—The 11th, in the Evening and the Night, S. W. 4^x.—The 14th, W. S. W. 4.—A very large Halo about the Moon the 3d.—A very great lucid, fiery, and saffron-coloured *A. B.* the 6th, H. 8, N. E. 1^x.

Greatest Height of ☉	31, 30.5, N. E. 2 ^x .	} Mean Height
Least	11, 28.4, S. W. 4 ^x .	
Coldest Day	31, 73, N. E. 2 ^x .	} Mean Height 56 $\frac{2}{3}$.
Warmest	5, 46, a Calm.	

The Small-pox were now more mild, altho' still epidemical; however, even in the distinct Kind, there was a very profuse Discharge of Saliva; besides which there were frequently at
the

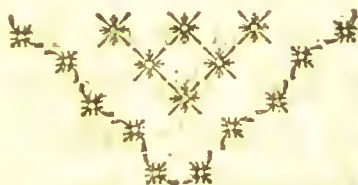
the Eruption of the Small-pox some Spots of a scarlet or vivid Colour, which generally disappeared again in a short Time.

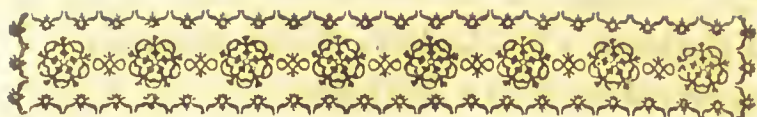
Pleurisies and Peripneumonies not uncommon, often those of the bastard Kind : Several Coughs and Catarrhs : Fluxes also still very rife : — You might observe indeed, in all the Diseases, that there was a serous Colluvies still predominant.

The whole Quantity of Rain for the Year

Dig. Dec.

1747 was = 32.246.





OF THE

A I R,

AND

EPIDEMIC DISEASES,

For the YEAR 1748.

JANUARY.

Full Moon the 4th. New Moon the 19th.

THE Station of the Barometer was
 T very high this Month, the Wind
 being generally easterly, and incli-
 ning in the Beginning to the North: How-
 ever from the 19th it was commonly southerly,
 the Atmosphere being often very dense, some-
 times cloudy, and always cold.—A very severe
 Frost upon the Coming-in of the Year.

Rain 5. 8. 9. 11. 14. 15. 17. $\frac{1}{21}$. $\frac{1}{23}$. $\frac{1}{26}$. $\frac{1}{27}$.
 $\frac{1}{28}$. $\frac{1}{30}$. — Dig. Dec.
 Snow 7. = 1.718.

A flight

A slight *A. B.* the 22d, H. 9, p. m. N. N. W. 1.
 —A Storm the 27th, at Night, S. E. b S. 4_x. —
 A very thick and stinking Fog, which continued a long Time, the 31st.

Greatest Height of ☉ 1, 30.5, E. N. E. 2. } Mean Height
 Least ——— 28, 29.3, S. E. b S. 3_x. } 29.9. $\frac{2}{3}$.

Coldest Day 2, 74, E. N. E. 2. } Mean Height 62.
 Warmest 30, 53, S. S. E. 2. }

As is almost constantly the Case, so now also the north-easterly Wind produced Coughs and Pains of the Side, and * those at present very violent ; thus, Pleurifies, Peripneumonies, and most violent Coughs, were even now very common : Numbers also were moreover plagued with a very violent and stubborn Asthma : The Expectoration in those Disorders was generally very sparing, altho' profuse Defluxions, † Rheums, mucous Quinsies, Hoarsenesses, and Swellings of the Fauces, plagued Numbers ; occasioned by the dense and very cold Air's shutting up the Pores of the Skin, from whence there arose an Accumulation of a serous Colluvies. A great many Rheumatisms.—The Small-pox were now every - where epidemic, nor indeed were they of so mild a Sort.

* See the *Essay on Fevers*, Page 171.

† ——— *Celsus*, Lib. iv, Cap. 4.

F E B R U A R Y.

Full Moon the 3d. New Moon the 17th.

We had now a very cold and also a very dry Season, the Wind being very often north-easterly : This occasioned a very sharp and a very thin Atmosphere, and but little Rain ; sometimes however there was Snow and Hail : The Barometer generally high.

Rain 21. $\frac{44}{23}$. $\frac{1}{28}$. — Snow 16. 24. —
Dig. Dec.

Hail 21. 29. = 0.598.

A smart Frost the 12th, 15th, 16th, 19th, 25th, and 26th.—Very thick stinking Fogs the 9th, 10th, and 12th.

Greatest Height of ☿ 9, 30.3, N.E. 1. } Mean Height
Least ——— 23, 29.2, S.W. 2. } 29.8 $\frac{17}{28}$.

Coldest Day 16, 77, N.E. bE. 2^x. } Mean Height 64 $\frac{12}{28}$.
Warmest 29, 58, W.N.W. 2. }

The Small-pox were far and near epidemic, and here and there small, black, and fatal ; at this Time the Salivation was much less than it ought to have been, notwithstanding that, in the preceding Months, it was too profuse.—*Catarrhal* Fevers, and also very violent Coughs, were very common ; so were likewise violent and very tedious *Paroxysms* of the Asthma.—This Season was very fatal to Persons whose Lungs were affected, of whom several died. A great Number

ber of Pleurifies and Peripneumonics ; frequently the Matter expectorated was very thick and glutinous, sometimes very thin ; neither of these were easily brought up, altho' the Cough agitated them more than enough ; nay, sometimes, by a Rupture of the Lungs, pure, unmixed Blood was brought up. However viscid the expectorated Matter was in those peripneumonic Cases, I have notwithstanding taken Notice, that the Blood which was drawn at other Times was much more sizy than now.—After the Pleurifies there sometimes remained very obstinate Pains in the Sides, which were much sooner overcome by anodyne Plaisters, or Epispastics, than by Bleeding, however necessary this might be in the Beginning of the Disease. Very violent Tooth-achs and Rheumatisms plagued Numbers.

M A R C H.

Full Moon the 4th. New Moon the 18th.

We had a cold Season during almost the whole Month of *March*, abundant Rain, and sometimes Storm : In the Middle of the Month nevertheless there was Ice, Snow, Hail, and a north-easterly Wind ; the Atmosphere very dry and cold ; but, towards the End, it was warmer, and much more humid.

Rain

Rain $\frac{''' }{2}$. $\frac{''' }{3}$. $\frac{''' }{4}$. 6. $\frac{'}{7}$. $\frac{'' }{8}$. $\frac{'' }{10}$. 11. $\frac{'' }{21}$. $\frac{''' }{24}$. $\frac{'' }{25}$.

$\frac{'' }{26}$. 27. 28. 29. 31. — Hail 8. 12. 15. —

Dig. Dec.

Snow 12. 13. 14. 18. = 4.280.

A Storm the 2d, at Night, W. S.W. 4_x. —
The 25th, a. m, S.W. 4. — The 27th, from the
very Beginning of the Morning to 10 a. m.
S.W. b W. 4.

Greatest Height of ☉ 20, 30.1, N. E. 1. } Mean Height
Least ——— 27, 29.0, S.W. b W. 4. } 29.7.

Coldest Day 15, 73, E. N. E. 2_x. } Mean Height 58 $\frac{2}{5}$.
Warmest 29, 50, W. S. W. 2. }

The Small-pox still, but much fewer, and less dangerous: Pleurifies and Peripneumonies common. The Expectoration was now easier, and oftentimes the Matter concocted and tinged with some Blood; frequently, nevertheless, it was very thin and acrimonious. Innumerable Coughs, and generally violent ones, so that, to such Persons as were affected in their Lungs, this Season was very pernicious, and not uncommonly fatal: Very terrible Paroxysms of the Asthma:—Several Rheumatisms:—Not a few were seized with the Apoplexy and Palsy, which frequently happens in very * cold Seasons: The great *Hippocrates* has also remarked, that Paraplegies were epidemic during an hard

* See what I have said above, in the Month of *March*,
1747.

Winter *. Lib. 1, Epidem. Constit. 3 : Which Cole also has mentioned in his Book of the Apoplexy.

A P R I L.

Full Moon the 2d: New Moon the 16th.

To the 19th of *April* the Atmosphere was very cold, the Wind generally blowing between the East and the North : Sometimes Ice, sometimes Snow : After the 20th a south-westerly Wind prevailed, and the Barometer fell.

Rain $\frac{''}{1}$. $\frac{'}{7}$. $\frac{'''}{10}$. $\frac{''}{12}$. $\frac{'}{17}$. $\frac{'}{19}$. $\frac{''}{20}$. $\frac{''}{25}$. 26. 27.
 $\frac{''}{28}$. $\frac{''}{29}$. $\frac{'}{30}$. ——— Dig. Dec.
 Snow 1. 11. 15. = 3.080.

Not an inconsiderable Frost the 18th.—Very great Hoar-Frosts frequently this Month : The Snow upon the Hills remained home to the 24th.—A slight Storm the 11th, at Night, E. b S. 4x.—An exceeding great, yellowish, and vivid Halo about the Moon the 22d, H. 10, S.W. 2.

Greatest Height of	8 9, 30.2, N. 1.	}	Mean Height
Least	28, 29.0, S.W. 3.		
			29.5 $\frac{2}{3}$.
Coldest Day	3, 64, E. b N. 1.	}	Mean Height 50 $\frac{1}{2}$.
Warmest	26, 40, S.W. b S. 2.		

* It is thus described : Χειμὼν Εὐρείος, ἀνχμοῖς, ψυχρὰ πέν-
 μαλα, μεγάλαι χιόνες, περὶ δὲ ἰσημερίην χειμῶνες μέγιστοι — πασα-
 πληγίαι πολλαῖσιν ἐγίνοντο, καὶ τίνες αὐτῷ ἰθνησκειν διὰ ταχέως.

Very

Very few Small-pox at present, but acute Disorders of the Breast common; very large Expectoration however now easily came on, with great Relief to the Patient: Humid Coughs innumerable, and oftentimes violent: Several consumptive Persons died, being quite worn out by the Impetuosity of the Cough, a Diarrhœa, or profuse Sweats: Some putrid and intermitting Fevers, but mostly in the Country. Numbers were tormented with a tedious and exceedingly painful Rheumatism; nor were those Persons relieved without a great Loss of Blood, which indeed was very sily;—nay, it was no unusual Thing for Bleeding itself, altho' three or four Times repeated, to prove ineffectual; nor did the Violence of the Pains yield to any Thing but *Deobstruents*, *Diaphoretics*, *Purgatives*, and *Anodynes*, and sometimes they were at last put to Flight only by the Use of the Cold-Bath.

By the Bye I shall however here remark, that, when a Rheumatism depends on an acrid and ferous Colluvies, plentiful Bleeding rather does Hurt than Good; and this very Thing * *Sydenham* himself takes Notice of; for certainly in this Case such Medicines as promote Sweats in a kindly Manner, which sweeten the acrimonious Humours, and properly purge them off, with the Interposition now and then of the paverous Mitigators of Pain, produce much

* Epistol. 1, Responsorio ad Doctorem Brady.

happier Effects.—Indeed I have myself used the following Medicines for several Years very successfully.

Every third or fourth Night I prescribed some Grains of Calomel, with *Pilul. Matthæi* or *saponaceous* Medicines ; but, the next Morning, some milder *Cathartics*, and at Night I quiet every Thing with *Anodynes*.—In some Cases, in the Beginning of the Disease, I give a Puke : In the intermediate Days I advise the following Medicines, or some like them :

R Pulp. Prunor. dulc. Æthiop. Mineral.
āā ʒ vi. Gum. Guiac. ʒ ii. Cremor. Tart.
Nuc. Myristic. Pulv. āā ʒ iii. Syrup.
Croci, q. s. m. f. Elect.

of which the Quantity of a Nutmeg, or an Hazle-Nut, is to be taken twice a Day at least, with a large Draught of Aq. Calcis, in which are infused the Raspings of *Guaiacum* and *Sassafras* ; to which I moreover add something of *Aq. Absinth. C.* with *Elix. Paregoric.* and *Essent. Antimon* āā ʒss, or ʒi.—(I would have the Aq. Calcis prepared from Oyfter or Cockle Shells well calcined ;) for I reckon this to be sweeter, and also more efficacious.—In the mean Time, as to Diet, I use that which is light and easy ; but, as to Drink, I prescribe very thin Whey, in which are infused Mustard-seed and *Sassafras*, in boiling Water ; and afterwards the *Pyrmont*,
Spaw,

Spaw, or *Scarborough Waters*.—To such Parts where the Pains continue very obstinately, I apply proper Fomentations, and then bye-and-bye Blisters. — Why do I, however, take so much Pains about those Things, when every three-halfpenny Quack * in pompous Style puffs off to the Populace his *infallible Anti-Rheumatics*?

M A Y.

Full Moon the 2d. New Moon the 16th.

Full Moon the 31st.

Both in the Beginning and at the Close of this Month there fell a large Quantity of Rain. The Wind was southerly, and the Atmosphere very dense; in the Middle of the Month, however, it was very thin; indeed thro' the Whole of it the Weather was sufficiently mild: Sometimes there were exceeding great Dews.

Rain $\frac{1}{2}$. $\frac{3}{4}$. $\frac{1}{5}$. 6. 7. $\frac{11}{10}$. 11. 22. 25. $\frac{1}{26}$. $\frac{11}{28}$.
 Dig. Dec.
 $\frac{11}{29}$. 31. = 2.250.

Greatest Height of ☿	14, 30.2, N. 1.	} Mean Height
Least	2, 29.2, S. S. W. 2.	
Coldest Day	8, 44, W. N. W. 2.	} Mean Height 35 $\frac{26}{36}$.
Warmest	20, 28, N. 1 ^x .	

The Small-pox up and down: Pleurifies and Peripneumonies common: Rheumatifins, at-

* Quorum Stultitia Quæstus Impudentiæ est. *Phædr.*
 Lib i, Pag. 14.

tended with a slight Fever; but very violent Pains tormented Numbers: Those, not only in the very Beginning of the Disease, required more plentiful Bleeding; but, besides this, afterwards, the copious Use of *Diluents*, *antiphlogistic Cathartics*, and *copious Anodynes*; amongst which the Elix. Paregoric. is the most commodious; because this at the same Time excites salutiferous Sweats, and quiets the Pain, being given in very thin Whey: This Whey is moreover very useful as a common Drink; and, being long drank, and freely, of itself at length removes the Disorder, especially if you add some Nitre to it. — Indeed seasonable and repeated Bleeding is equally salutary in an hot Rheumatism, to younger and robust Persons, as in a Pleurisy itself.

Putrid Fevers up and down; but an Intermittent scarcely to be seen: Several Coughs, and very acrid Defluxions, with Swellings of the Fauces, Lips, Eyes, &c.; nay, so very acrimonious a Humour flowed from those Parts, that it not only vellicated, but even blistered, the Nostrils, and, falling from thence upon the Lungs, excited a most violent Cough, and eroded the very Membrane of the *Trachea*: Hence many became consumptive, and joined Numbers of those who had died before them.

J U N E.

New Moon the 14th. Full Moon the 29th.

In the Beginning of *June* the Atmosphere was very dense, cold, and moist; however, after the 17th, the Weather was very warm and mild.

Rain 1. $\frac{1}{2}$. 4 — 6. $\frac{1}{8}$. 10. 12. $\frac{1}{4}$. $\frac{1}{2}$. 29.
 Dig. Dec.
 = 1.102.

Hottest Days 20. 21. 22. 26. 27.

Greatest Height of ☿	17, 29.9, N. N. W. 1.	} Mean Height
Least	29, 29.3, S. b E. 2.	
Coldest Day	4, 40, W. N. W. 2.	} Mean Height 28 $\frac{2}{9}$.
Warmest	27, 15, S. b E. 2 ^x .	

The Small-pox here and there: Some putrid and slow Fevers: A Consumption of the Lungs was every-where common, and several Persons died of it. An hoarse Voice, a shrill Cough, greenish, muddy, purulent, stinking Matter expectorated, a Pain in the Back and Weakness, profuse Sweats, and Looseness, succeeding one another by Turns, attended with a Swelling of the Legs and Feet, with a disagreeable Wheezing in the Breast, and a Difficulty of Breathing, were the certain Presages of impending Death; sometimes accompanied with the Rupture of a Vomica in the Lungs.

Healthy, Country Air, Riding out every Day, and a well-regulated Milk-Diet, and mild, demulcent

mulcent Liquors ; such as an *Almond Emulsion*, with a Decoction of preserved Eryngo-Root, and some other Things of this Kind ; appeared to be much more serviceable to those consumptive Persons than a laboured Hodge-Podge of Medicine, which always offends a weak Stomach ; but now and then the Violence of the Cough was to be restrained by Opiates, and, if the Flux was too profuse, it was to be checked, as were also the too great Sweats : Take Care, however, at all Times, according to the Admonition of the * divine Old Man, not to do Hurt; if you can't do Good.

J U L Y.

New Moon the 14th. Full Moon the 28th.

The Weather in the Beginning of *July* was dry and warm, afterwards changeable, and much colder ; frequent Rains, the Wind fluctuating, but most frequently South ; this produced a moist and dense Atmosphere : Towards the End there was Sun-shine and great Heat, and a soft north-westerly Wind.

Rain $\overset{1}{\text{I. 4. 8. 9. 10. 11. 12. 13—15. 19. 23.}}$
 $\overset{1}{\text{24. 25. 31.}} = \overset{1}{\text{4. 134.}}$ Dig. Dec.

Very violent Thunder and Lightning, with

* *Hippocrat. Epidem. Lib. i, Constitut. 2, at the End.*

prodigious Rains, the 23d, 24th, and 31st.—
A Storm the 24th, p. m. S.W. 4.

Greatest Height of	☿	28, 29.9, N.W. 1.	} Mean Height
Least	—	24, 29.0.	

Coldest Day	25, 38, W.S.W. 3 ^x .	} Mean Height 29 $\frac{1}{3}$ $\frac{6}{1}$.
Warmest	30, 16, N.W. 1.	

The Small-pox up and down; in general, however, they were sufficiently mild; some, nevertheless, were attended with Boils, Carbuncles, and Ulcers: Some putrid Fevers: The bilious Colic common.

AUGUST.

New Moon the 13th. Full Moon the 27th.

The Harvest was not a little scorched up this Month by the Heat of the Dog-Star; however now and then there were very great Dews, but in the Middle of *August* Rain enough; hence the Atmosphere became very dense and humid. From the 4th to the 14th the Wind was easterly, and then, quite home to the End, changeable.

Rain	2.	4.	$\frac{1}{14}$.	$\frac{1}{15}$.	16.	$\frac{1}{17}$.	18—20.	$\frac{1}{31}$.
Dig. Dec.								
=	1.256.							

A great deal of Lightning the 12th —A violent Storm the 15th, E. S. E. 4. — Terrible Thunder and Lightning the 31st, in the West. — A very great *A. B.* the 28th, H. 8, p. m. E. N.

E.N.E 2.—A great many shining, vivid Beams from the very Horizon, at almost right Angles, darted, as it were, thro' a very lucid Rainbow, in the Manner of an Arrow out of a Bow.

Greatest Height of	8	7, 30.0, E. 2.	} Mean Height
Least	15,	29.2.	
			29.6 $\frac{20}{27}$.
Coldest Day	19, 36,	W.N.W. 1 st .	} Mean Height 28 $\frac{2}{27}$.
Warmest	5, 20,	E. b S. 2.	

The Small-pox here and there, but very little fatal; however, upon their Drying-up, there generally broke out several Boils, which were very painful, and at length suppurated: Choleræ and Dysenteries common: Some Ophthalmies and Swellings of the Fauces.

Pleuro-peripneumonies raged up and down among the Country - People, owing to their using cold Liquors, and being exposed to the cold Air, when they were in a profuse Sweat; both of which were indeed very grateful, but highly dangerous; so that we should always obey the Dictates of Reason, whilst we indulge ourselves in any of our natural Gratifications,

S E P T E M B E R.

New Moon the 11th. Full Moon the 25th.

This Month was very dry and warm, the Atmosphere nevertheless was generally very dense; the Wind variable and mild; in the Beginning it was north-easterly, and the Sun fer-

vent, but towards the End of the Month south-west : Frequently there fell very great Dews.

Rain $\frac{11}{7}$. $\frac{1}{11}$. 12. 13. 16. 19. 20. 21. 24.
Dig. Dec.
27—29. = 0.914.

Greatest Height of ☿ 3, 30.1, E.N.E. 1. } Mean Height
Least ——— 8, 29.2, E.S.E. 2x. } 29.7 $\frac{2}{3}$.
Coldest Day 31, 44, S.W. 3. }
Warmest 1, 28, W.N.W. 1. } Mean Height 34.

The Small-pox still, and in general favourable ; nevertheless they were still attended with ulcerous Pustules and Boils at the Conclusion of the Disease : Frequently also there came on Ophthalmies, and excruciating Pains in the Limbs, unless the Patients were early and well purged. — Diarrhœas and Dysenteries affected great Numbers ; nevertheless a bloody Flux was rare, notwithstanding it was sometimes fatal, a Singultus, and a perpetual Desire of going to Stool, stealing on upon them ; for the Relief of which nothing answered so well as my
* anodyne Clyster, which very often most happily stops a profuse Diarrhœa, when all Things else have been ineffectual.

* See before, in the Month of April, 1743.

O C T O B E R.

New Moon the 11th. Full Moon the 25th.

The dry Weather continued, and the Barometer stood high home to the 10th of *October*, so that in the Beginning of the Month all the Wells and Springs were quite dried up; afterwards, however, it was showery, and much colder: A north-east Wind prevailed until the 18th, but from that Time a south-west.

Rain $\frac{1}{10}$. $\frac{1}{11}$. $\frac{1}{12}$. 13 — 16. $\frac{1}{17}$. $\frac{1}{19}$. 20. $\frac{1}{21}$.
 $\frac{1}{22}$. $\frac{1}{24}$. $\frac{1}{25}$ — 26. $\frac{1}{27}$. $\frac{1}{28}$. $\frac{1}{29}$. $\frac{1}{30}$. — Hail 10.

Dig. Dec.

— Snow 11. = 3.696.

Ice the 3d, 12th, and 13th.—Thunder and Lightning the 29th, at Night.—A Storm the 30th at Night, and also in the Morning of the 31st, S.W. b W. 4.—Exceeding great Hoar-Frosts in the Beginning of the Month.

Greatest Height of	8	2, 30.3, N.E. 1.	} Mean Height
Least	—	22, 28.7, S.E. b S. 3.	
Coldest Day	12, 61, N. 1 ^x .	} Mean Height 48 $\frac{6}{35}$.	
Warmest	5, 34, N. b W. 1.		

A great many Small-pox here; in some Places they were epidemical: The Colic exceeding common, and at present chiefly owing to the Drinking of new Cyder: Pleuro-peripneumonies up and down, especially about the Middle of

the Month, however the Blood which was drawn was not very fizy. — Pains in the Teeth, Defluxions, very violent Coughs, in great Numbers, and amongst Children the Hooping-Cough raged :—Moreover, a slight Kind of a catarrhal Fever, with a great Oppression of the Breast, a moist, troublesome Cough, Pain in the Ventricle, and rheumatic Tortures, was very common ; however, upon the Coming-on of a Flux, and a little Gripping, it in a short Time vanished.

Catarrhal Fevers seem not only to be owing to an obstructed Perspiration, but also to the cold Vapours of the Atmosphere insinuating themselves by the various Passages of the Body ; and therefore they chiefly attack People in moist and cold Seasons : It is moreover my Opinion, that there is also a certain * aerial and acrimonious Salt in this Vapour, which in some Manner thins the Blood, vellicates the Ramifications of the Nerves, and disorders the whole Mass of Humours ; for otherwise it is no easy Matter to say from whence so sudden a Commotion often happens, to Persons exposed to the cold and damp Air ; whence such an immense Defluxion of Humour thro' the Nostrials, Eyes, and Fauces, so very acrimonious indeed as frequently to erode

* See the Preface to Vol I, *De Aëre & Morbis Epidemicis*.

the very Skin itself, and to excite both violent Coughs and continual Sneezings ; nor was this the Case of a few Persons only, but the Disease was at once, and at the same Time, propagated on all Sides, amongst innumerable People. To me therefore it seems probable, that the greater the Quantity of this aerial Salt is, which is dispersed thro' the Atmosphere, so the Catarrh, which rages, is so much the more acrimonious ; since, even in some slight catarrhal Fevers, the Defluxion is much more favourable than in others ; in general indeed it is most acrimonious in rainy, snowy, and cold Seasons.

If however this acrimonious and serous Coluvies is generated by those Causes, it is much better discussed by Sweats, and mild Cathartics, than by profuse Bleeding, which is scarcely ever requisite, unless perhaps in the very Beginning of the Disease, and where the Fever was highly inflammatory.

N O V E M B E R.

New Moon the 9th. Full Moon the 23d.

Very little Rain this Month, and the Station of the Barometer very high, especially in the Middle of the Month : The Wind was very frequently easterly, generally veering to the North ; the Atmosphere was for the most Part very dense, sometimes exceeding rare and cold,
frequently

frequently very great Hoar-Frosts, and not uncommonly Ice.

Rain 1. 15. 17. $\frac{1}{18}$. 19. $\frac{2}{20}$. 22. 24. 25. 29.
Dig. Dec.
30. ——— Snow 21. = 0.906.

Greatest Height of ☼	14, 30.6, N.E. b E. 1.	} Mean Height
Least	2, 29.3, S.W. 2.	
		30.0 $\frac{5}{36}$.
Coldest Day	21, 68, N.E. 1 ^x , a most severe Frost.	} Mean
Warmest	2, 42.	
		54.

The Small-pox almost every-where, nevertheless sufficiently favourable, being in general distinct : Peripneumonies and Pleurifies up and down : Coughs, Κορύζαι, and slight Anginas, common : Some slow and putrid Fevers : Very many Colics and Rheumatisms.

DECEMBER.

New Moon the 9th. Full Moon the 23d.

A most melancholy Season now came on ; constant Rain, and almost a perpetual south-westerly Wind, and that now and then very stormy : Hence the Atmosphere became exceedingly moist. Towards the End of the Month there were great Floods every-where. —Not the very least Frost all *December*, and the Sun very rarely.

Rain $\frac{1}{1}$. 2—4. 6. $\frac{1}{8}$. $\frac{1}{9}$. 10—14. $\frac{2}{15}$. $\frac{3}{16}$. 17.
 $\frac{2}{18}$.

$\frac{''}{18}$. $\frac{'}{19}$. $\frac{'}{20}$ — 21. $\frac{'}{23}$. $\frac{'''}{24}$. $\frac{''}{25}$. $\frac{'''}{26}$. 27. $\frac{''''}{28}$. $\frac{''''}{30}$.

$\frac{''}{31}$. Dig. Dec.

31. = 6.746.

A Storm the 1st, at Night, W. S. W. 4_x. — The 14th, at Night, W. S. W. 4. — A very violent one the 15th, all Night, S. W. 4^x, which lasted also until Four o'Clock in the Afternoon of the 16th; and sunk the Mercury in the Barometer exceedingly, namely, to 28.1. — The 16th, H. 10, a. m. S. W. b S. 4^x. — The 23d, at Night, S. S. W. 4. — The 24th, in the Morning, S. W. 4_x. — The 25th, S. W. 4. — A rainy Wind all the Night from the 8th to the 13th; however this did not produce any considerable Fall in the Barometer. — A very bright Lunar Iris the 15th, H. 10, p. m. W. S. W. 3^x. — Thunder and Lightning the 16th, in the Morning. — A great *A. B.* the 4th, H. 8, p. m. N. W. 2_x.

Greatest Height of	☿ 7, 30.2, W. N. W. 1.	} Mean Height
Least	16, 28.1.	

Coldest Day	17, 60, W. N. W. 2.	} Mean Height 52 $\frac{4}{5}$.
Warmest	3, 44, S. W. 3.	

The Small-pox still here and there, but generally mild; nevertheless, in the distinct Kind, if they were somewhat thicker, the Patients had a very large Expectoration, and a very great Discharge of thick, muddy Urine, which was always an happy Omen. A great Number of Colics, several of which were owing to the Drinking

Drinking new-made Cyder; not a few indeed were tormented with both a violent Colic and a terrible Pain in the Limbs, from whence oftentimes a Palsy in the Arms, and a general Debility in all the Members of the Body, which dragged on those miserable Persons for * a long Time.

The whole Quantity of Rain, for the Year
Dig. Dec.
1748, = 30.680.

* Concerning those Complaints, and the Method of Cure, consult my little Treatise *de Morbo Colico*, at the End of the first Volume *de Aëre & Morbis Epidemicis*.

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E R R A T A.

E R R A T A.

FOR *Squinzies*,—Preface, Page xviii, and in the Body of the Work, Pages 14, 17, 19—read *Quinsies*.

For *Spitting*,—Pages 66, 75, 145, 146, 188—read *Expectoration*.

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|------|-------|------|------------|----------------------|---|
| Page | 23, | Line | 9, | read— | <i>in three or four Places.</i> |
| — | 25, | — | 15, | read— | <i>involuntarily.</i> |
| — | 56, | — | 18, | read— | <i>often.</i> |
| — | 60, | — | 20, | read— | <i>seemed very dense.</i> |
| — | 65, | — | 7, | blot out— | <i>of their ancles.</i> |
| — | 76, | — | 14, | read— | <i>several Days and Nights.</i> |
| — | 80, | — | 17, | read— | <i>overcome, small Ulcers.</i> |
| — | 92, | — | 2, | read— | <i>this scorbutic Plague.</i> |
| — | 107, | — | | penultimâ, read— | <i>to produce.</i> |
| — | 223, | — | | antepenultimâ, read— | <i>disfigured with Bile.</i> |
| — | 238, | — | 7, | read— | <i>nor did.</i> |
| — | Ibid. | — | 14 and 15, | read— | <i>the Beginning of the Colic was often felt, at the Bottom of the right Hypochondrium.</i> |
| — | 239, | — | 21, | read— | <i>or is it not sure,</i> |
| — | 268, | — | 15, | read— | <i>Dog-Days.</i> |
| — | 274, | — | 12, | read— | <i>Coughs, Catarrhs,</i> |







